

ἈΤΛΑΣ ΟΥΡΑΝΙΟΣ,
The COELESTIAL ATLAS;

OR, A NEW

E P H E M E R I S

For the YEAR of our LORD 1798.

Being the Second after

BISSEXTILE, or LEAP-YEAR.

Wherein are contained

The Heliocentrick and Geocentrick Places of the Planets,
the ECLIPSES of the Luminaries, and other remarkable PHENO-
MENA that will happen this Year.

Carefully computed

From the genuine TABLES of Dr. EDMUND HALLEY,
those of Professor MAYER, and other the most and most correct
ASTRONOMICAL TABLES.

A L S O

A Complete ALMANACK, containing the FEASTS and FASTS
of the Church of ENGLAND; the Times of the LUNATIONS;
the Rising and Setting of the Sun, Moon, and Planets, &c.

Adapted to the

Meridian and Latitude of the Royal Observatory of
GREENWICH.

To which are added

Several useful TABLES: As, a TABLE of the Sun's
semi-diurnal Arcs, by which the Times of the Sun's Rising and
Setting may be known by Inspection, on every Day of the Year, and
in any Part of GREAT-BRITAIN or IRELAND; a TABLE,
and a very correct one of the Eclipses of the Sun and Satellite;
a TABLE of the Sun's Right-Ascension; and TABLES of
the most remarkable fixed Stars, corrected from CAMBRIDGE'S
Catalogue; and, lastly, a correct TABLE of the Latitudes and Longi-
tudes of the most remarkable Places in the World.

By ROBERT WHITE,
Teacher of the Mathematicks.

Οἱ ἀγαθοὶ διηγήσονται δόξαν Θεοῦ.

The FORTY-NINTH IMPRESSION.

L O N D O N :

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Chronological Notes for the Year 1798.

Golden Number	-	-	13	Septuagesima Sund.	Feb.	4
Cycle of the Sun	-	-	15	Shrove Sunday	Feb.	18
The Epact	-	-	12	Easter Day	Apr.	8
Dominical Letter	-	-	G	Whit Sunday	May	27
Number of Direction	-	-	18	Trinity Sunday	June	3
Roman Indiction	-	-	1	Advent Sunday	Dec.	2

Astronomical CHARACTERS explained.

♈ Aries	♋ Cancer	♎ Libra	♏ Capricorn
♉ Taurus	♌ Leo	♍ Scorpio	♐ Aquarius
♊ Gemini	♍ Virgo	♐ Sagittary	♑ Pisces
♄ Saturn	☉ Sol (the Sun)	☾ Luna (the Moon)	☿ Herschel,
♃ Jupiter	♀ Venus	♊ Moon's N. Node	the New or
♂ Mars	☿ Mercury	♋ her S. Node	Georgian Planet.
♋ Conjunction when Planets are in the same Sign, Deg. Min. &c.			
* Sextile when 2 Signs dist.		△ Trine when 4 Signs dist.	
□ Quartile when 3 Signs dist.		♋ Opposition when 6 Signs dist.	

Of the Four Quarters of the YEAR 1798.

			d	h	m
THE Spring Quarter begins	-	-	March 20	8	25 morn.
The Summer Quarter begins	-	-	June 21	6	9 morn.
The Autumnal Quarter begins	-	-	Sept. 22	7	57 aftern.
The Winter Quarter begins	-	-	Dec. 21	0	42 aftern.

THE beautiful Planet VENUS will be an Evening Star till March the 15th; and after that Time she will be a Morning Star to the Year's End.

JUPITER will be an Evening Star till April the 22d; then a Morning Star till the 13th Day of November, at which Time he becomes an Evening Star, and so continues to the Year's End.

The NAMES of the Learned JUDGES of the LAW.

I. Right Hon. Alexander Wedderburne Lord Loughborough, Lord High Chancellor of Great Britain.

Right Honourable Sir Richard Pepper Arden, Knt. Master of the Rolls.

II. In the } Right Hon. Lord Kenyon, L. C. J. Sir W. H. Ashurst, Knt.
K. Bench. } Sir Soulden Lawrence, Knt. Sir Nash Grose, Knt.

III. In the } Sir James Eyre, Knt. L. C. J. Sir Giles Rooke, Knt.
C. Pleas. } John Heath, Esq. Sir Francis Buller, Bart.

IV. In the } Sir Arch. Macdonald, Kt. L. C. B. Sir Beaumont Hotham, Kt.
Exchequer } Sir Richard Perryn, Knt. Sir Alex. Thompson, Knt.

Sir John Scott, Knt. Attor. General; Sir John Mitford, Knt. Solic. Gen.

A TABLE of TERMS and Returns for the Year 1798.

Hilary Term begins Jan. 23, ends Feb. 12.

Returns or Effoign-days.				Exc.	Ret.	Ap.	W. D.
In eight Days of St. Hilary,	-	-	Jan. 20	21	22	23	Tuesday
In fifteen Days of St. Hilary	-	-	- 27	28	29	30	Tuesday
On the Mor. of the Purif. of the Bl. V. M.	Feb. 3		4	5	6		Tuesday
In eight Days of the Purif. of the Bl. V. M.			9	10	11	12	Monday

Easter Term begins April 25, ends May 21.

In fifteen Days of Easter	-	-	April 22	23	24	25	Wedn.
From Easter Day in three Weeks	-	-	29	30	1	2	Wedn.
From Easter Day in one Month	-	-	May 6	7	8	9	Wedn.
From Easter Day in five Weeks	-	-	13	14	15	16	Wedn.
On the Mor. of the Ascension of the Lord			18	19	20	21	Monday

Trinity Term begins June 8, ends June 27.

On the Morrow of the Holy Trinity,	-	-	June 4	5	6	8	Friday.
In eight Days of the Holy Trinity,	-	-	10	11	12	13	Wedn.
In fifteen Days of the Holy Trinity,	-	-	17	18	19	20	Wedn.
From the Day of the Holy Trin in 3 Weeks	-	-	24	25	26	27	Wedn.

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the Morrow of All Souls	-	-	Nov. 3	4	5	6	Tuesday
On the Morrow of St. Martin	-	-	12	13	14	15	Thursd.
In eight Days of St. Martin	-	-	18	19	20	21	Wednesf.
In fifteen Days of St. Martin	-	-	25	26	27	28	Wednesf.

N. B. No Sittings in Westminster-Hall on the Second of February, Ascension-day, and Midsummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but four Days.

Note, The first and last Days of every Term, are the first and last Days of Appearance.

BIRTH-DAYS of the ROYAL FAMILY.

KING GEORGE III. June 4, 1738	Prince Aug. Fred. Jan. 27, 1773
Prince of Wales, Aug. 12, 1762	Prince Adolph. Fred. Feb. 24, 1774
Duke of York, August 16, 1763	Princess Mary, April 25, - 1776
Duke of Clarence, Aug. 21, 1765	Princess Sophia, Nov. 3, - 1777
Prs. of Wirtemberg, Sept. 29, 1766	Princess Amelia, Aug. 7, - 1783
Prince Edward, Nov. 2, - 1767	Queen Charlotte, May 19, 1744
Prs. Augusta Sophia, Nov. 8, 1768	Duchess of Brantwic, Aug. 11, 1737
Prs. Elizabeth, May 22, - 1770	Duke of Gloucester, Nov. 25, 1743
Prince Ernest Augustus, June 5, 1771	

SOVEREIGNS of EUROPE, their Accession, &c.

Kingdoms, &c.	To whom subject.	When born.	Began to reign
England, &c.	George III.	June 4, 1738	Oct. 25, 1760
Russia	Paul I.	Oct. 1, 1754	Nov. 17, 1796
Spain	Charles IV.	Nov. 11, 1748	Dec. , 1788
Portugal	Mary	Dec. 7, 1734	Feb. 24, 1777
Prussia	Frederic IV.	Sept. 25, 1744	Aug. 17, 1786
Denmark & Norway	Christian VII.	Jan. 29, 1749	Jan. 14, 1766
Sweden	Gustavus IV.	Nov. 1, 1778	Mar. 29, 1793
Germany	Francis II.	Feb. 12, 1767	Mar. 1, 1792
Poland	Stanislaus III.	Jan. 17, 1732	Nov. 25, 1764
Holland	William V.	March 8, 1748	Oct. 11, 1751
Papedom	Pius VI.	Dec. 27, 1717	Feb. 18, 1775
Sardinia	Victor	June 26, 1726	Mar. 20, 1771
Ottoman Empire	Selim III.	July 17, 1761	April 7, 1789

The FULL WEIGHT of the Coins, with the LEAST WEIGHT allowed to pass of the Gold Coin.

Wt. allowed.		Full Wt.	SILVER.		Full Wt.
GOLD.	dwt. gr.	dwt. gr.		dwt. gr.	
Guinea, - -	5 8	5 9 $\frac{3}{4}$	A Crown, - -	19	8 $\frac{1}{4}$
Half Guinea, -	2 16	2 16 $\frac{3}{4}$	Half Crown, -	9	16 $\frac{1}{4}$
Quarter Guinea, 1	8	1 8 $\frac{3}{4}$	Shilling, - -	3	20 $\frac{1}{4}$
			Six Pence, - -	1	22 $\frac{1}{4}$

According to the above proportions it appears, that the value of a lb. of silver is 62 s. or 3 l. 2 s. and of a lb. of gold is 44 $\frac{1}{2}$ guineas, or 46 l. 14 s. 6 d. Also that the oz. of silver is 5 s. 2 d. and the oz. of gold 3 l. 17 s. 10 $\frac{1}{2}$ d. So that the value of the standard gold is 15 times that of the silver, and 1-14th more.

A TABLE of the **KINGS and QUEENS** of **ENGLAND**
since the **CONQUEST.**

Kings and Queens	Born A.D.	Began their Reign	Reigned Y. M. D.	Age	Rem. Deaths and Dethroned	Where buried
Will. Conq.	1027	1066 Oct. 14	20 10 26	60	Burst by Leap.	Caen, Norm
Will. Rufus	1057	1087 Sept. 9	12 10 24	43	Slain acciden- tally.	Winchester
Henry I.	1068	1100 Aug. 2	35 3 29	77		Reading
Stephen	1105	1135 Dec. 1	18 10 24	49		Feverham
Henry II.	1133	1154 Oct. 25	34 8 11	55		Fonteveraud
Richard I.	1156	1189 July 6	9 9 0	43	Slain with an Arrow.	Fonteveraud
John	1165	1199 April 6	17 6 13	50		Worcester
Henry III.	1207	1216 Oct. 19	56 0 28	65		Westminster
Edward I.	1239	1272 Nov. 16	34 7 21	67		Westminster
Edward II.	1284	1307 July 7	19 6 18	43		Gloucester
Edward III.	1312	1327 Jan. 25	50 4 27	65		Westminster
Richard II.	1366	1377 June 21	22 3 8	33	Dep. & murd.	Westminster
Henry IV.	1367	1399 Sept. 29	13 5 20	46		Canterbury
Henry V.	1389	1413 Mar. 20	9 5 11	33		Westminster
Henry VI.	1421	1422 Aug. 31	38 6 4	49	Dep. & murd.	Windfor
Edward IV.	1442	1461 Mar. 4	22 1 5	41		Windfor
Edward V.	1471	1483 April 9	0 2 15	12	Murder'd.	Not known
Richard III.	1443	1483 June 22	2 2 0	42	Slain in Battle.	Leicester
Henry VII.	1456	1485 Aug. 22	23 8 0	52		Westminster
Henry VIII.	1492	1509 April 22	37 9 6	55		Windfor
Edward VI.	1537	1547 Jan. 28	6 5 8	15		Westminster
Mary I.	1516	1553 July 6	5 4 11	42		Westminster
Elizabeth	1533	1558 Nov. 17	44 4 7	69		Westminster
James I.	1566	1603 Mar. 24	22 0 3	58		Westminster
Charles I.	1600	1625 Mar. 27	23 10 3	48		Windfor
Charles II.	1630	1649 Jan. 30	36 0 7	54		Westminster
James II.	1633	1685 Feb. 6	4 0 7	67	Abdicated.	St. Germain
Mary II.	1662	1689 Feb. 13	5 10 15	32		Westminster
William III.	1650	1689 Feb. 13	13 0 23	52		Westminster
Anne	1665	1702 Mar. 8	12 4 24	49		Westminster
George I.	1660	1714 Aug. 1	12 10 10	67		Hanover
George II.	1683	1727 June 11	33 4 14	77		Westminster
George III.	1738	1760 Oct. 25	Crowned Sept. 22, 1761.			

Above you view the Rise and Fall of Kings,
Whose Fate sometimes a useful Lesson brings.
Well if all Men could profit from the past!
Each know his Duty, each excel the last,
And justly execute his stated Task.

A TABLE of the most Reverend, Right Reverend, and Reverend, the ARCH-BISHOPS, BISHOPS and DEANS, exercising Ecclesiastical Jurisdiction, 1798.

BISHOPS.	Sees.	Date.	Succeeded.	DEANS.
Dr. John Moore	<i>Bangor</i>	1775	Ewer deceased	
Arch-Bishop	<i>Canterb. A.B.</i>	1783	Cornwallis dec.	Dr. Powys
Dr. Will. Markham	<i>Chester</i>	1771	Keene transl.	
Arch-Bishop	<i>York A. B.</i>	1777	Drummond de.	Dr. J. Fountayne
Dr. Beilby Porteus	<i>Chester</i>	1776	Markham tran.	
	<i>London</i>	1787	Lowth deceas.	Bishop Pretyman
	<i>Londaff</i>	1769	Shipley transl.	
Hon. Dr. S. Barrington	<i>Salisbury</i>	1782	Hume dec.	
	<i>Durham</i>	1791	Thurlow dec.	Bishop Cornwallis
	<i>Litch & Cov.</i>	1771	Egerton transl.	
Hon. Dr. B. North	<i>Worcester</i>	1774	Johnson deceas.	
	<i>Winchester</i>	1781	Thomas deceas.	Dr. Newton Ogle
Dr. Charles Moss	<i>St. David's</i>	1766	Lowth transl.	
	<i>Bath & Wells</i>	1774	Willes decease	Ld. Fr. Seymour
	<i>St. David's</i>	1774	Moss transl.	
H. Dr. James Yorke	<i>Gloucester</i>	1779	Warburton dec.	
	<i>Ely</i>	1781	Keene deceased	Dr. W. Cooke
Dr. Richard Hurd	<i>Litch. & Cov.</i>	1775	B. North tr.	
	<i>Worcester</i>	1781	B. North tr.	Dr. Onslow
Dr. John Butler	<i>Oxford</i>	1777	Lowth transl.	
	<i>Hereford</i>	1788	Harley deceas.	Dr. N. Wetherell
Dr. John Warren	<i>St. David's</i>	1779	Yorke transl.	
	<i>Bangor</i>	1783	Moore transl.	Mr. Warren
Dr. J. Cornwallis	<i>Litch. & Cov.</i>	1781	Hurd transl.	Dr. Bapt. Proby
	<i>Bristol</i>	1782	Newton dec.	
Dr. Lewis Bagot	<i>Norwich</i>	1783	Yonge dec.	
	<i>St. Asaph</i>	1790	Hallifax dec.	Mr. W.D. Shipley
Dr. Richard Watfon	<i>Londaff</i>	1782	Barrington tr.	Dr. R. Price, Pr.
Dr. Edward Smalwell	<i>St. David's</i>	1783	Warren transl.	
	<i>Oxford</i>	1788	Butler transl.	Dr. Cyril Jackson
Dr. G. Pretyman	<i>Lincoln</i>	1787	Thurlow tran.	Sir Ri. Kaye, Bt.
Dr. John Douglas	<i>Carlisle</i>	1787	Law dec.	
	<i>Salisbury</i>	1791	Barrington tra.	Dr. John Ekins
Dr. William Cleaver	<i>Chester</i>	1788	Porteus tran.	Dr. G. Cotton
Dr. Samuel Horsley	<i>St. David's</i>	1788	Smalwell tr.	
	<i>Rochester</i>	1793	Thomas dec.	Dr. T. Dampier
Dr. Richard Beadon	<i>Gloucester</i>	1789	Hallifax tran.	Dr. Josiah Tucker
Dr. E. V. Vernon	<i>Carlisle</i>	1791	Douglas transl.	Dr. Isaac Milner
Dr. Charles Sutton	<i>Norwich</i>	1792	Horne decea.	Dr. Joseph Turner
Dr. Spencer Madan	<i>Bristol</i>	1792	Bagot transl.	
	<i>Peterborough</i>	1794	Hinchliffe dec.	Dr. Peter Peckard
Dr. Regi. Courtenay	<i>Bristol</i>	1794	Horsley transl.	Dr. C. Harward
	<i>Exeter</i>	1797	Madan transl.	Dr. John Hallam
Dr. Cornwall	<i>Bristol</i>	1797	Butler dec.	Mr. Wollaston, P.
Hon. Dr. Wm. Stuart	<i>St. David's</i>	1793	Courtenay tra.	
Dr. Buckner	<i>Chichester</i>	1797	Ashburnham d.	Mr. Combe Miller
	<i>Westminster</i>	1793	Thomas dec.	Bishop Horsley
	<i>Windsor</i>	1788	Douglas prom.	Bishop Sutton
Dr. Crigan	<i>Sodor and Man</i>			

In the course of this year there will happen four eclipses, two of the sun, and two of the moon; but none of them will be visible here.

I. *May 15*, the Sun is eclipsed, but invisible here. The conjunction is at 8h 4 $\frac{1}{2}$ m afternoon, in longitude $1^{\circ} 25' 8''$, the moon's latitude being $49^{\circ} \frac{1}{2}$ south. The Sun will be centrally eclipsed on the meridian, at 7h 39m, in longitude $114^{\circ} \frac{3}{4}$ west, and latitude 49° south.

II. *May 29*, the Moon is totally eclipsed, but invisible here.

Beginning of the eclipse	4h	27m	afternoon
Beginning of total darkness	5	45	
Middle of the eclipse	6	10	
Ecliptic opposition	6	15	
End of total darkness	6	35	
End of the eclipse	7	53	

Digits eclipsed $13^{\circ} 14'$ from south side of the earth's shadow.

III. *November 8*, the Sun is eclipsed, but invisible here. The conjunction is at 1h 51 $\frac{1}{2}$ m in the morning, in longitude $7^{\circ} 15' 56^{\frac{1}{2}}''$, the moon's latitude being $49'$ four-fifths north. The Sun will be centrally eclipsed on the meridian, at 1h 24m, in longitude 159° east, and latitude $46^{\circ} \frac{1}{2}$ north.

IV. *November 23*, the Moon is partially eclipsed, but invisible here.

Beginning of the eclipse	11h	9m	morning
Middle of the eclipse	0	37 $\frac{1}{2}$	afternoon
Ecliptic opposition	0	44 $\frac{1}{2}$	
End of the eclipse	2	6	

Digits eclipsed $7^{\circ} 50'$ on the Moon's south limb.

Obliquity of the Ecliptic.	1798.	Equation of Equinoctial Points.
23° 27' 55".7	- January 1,	- 17".1
23 27 56.3	- April 1,	- 16.6
23 27 56.9	- July 1,	- 15.9
23 27 57.5	- October 1,	- 15.2
23 27 58.0	- Decemb. 31,	- 14.3

The LUNATIONS.

Full Moon the 2d day, at 34 minutes past 4 afternoon.
 Last quarter the 9th day, at 25 minutes past 7 morning.
 New Moon the 16th day, at 49 minutes past 12 night.
 First quarter the 25th day, at 23 minutes past 5 morning.

M	Sundays & other	☉	☉	☉'s	☉'s	☉ rises	☉	Clock
D	remark. days	rises	fets	declin.	declin.	& fets	fouth	bef. ☉
1	Circumcision	8 4	3 56	22 58	24 n 27	6 m 49	11 a 18	4' 15'
2		8 4	3 56	22 53	25 26	☉ rises	morn	4 43
3		8 3	3 57	22 47	24 36	4 a 49	0 21	5 11
4		8 2	3 58	22 41	22 1	6 10	1 24	5 38
5	Old Chri. Day	8 2	3 58	22 34	17 58	7 39	2 24	6 4
6	Epiphany	Tw. day	3 59	22 26	12 50	9 5	3 21	6 31
7	S. att. Epiph.	8 0	4 0	22 19	7 4	10 29	4 14	6 56
8	Luc. Plough M.	7 59	4 1	22 11	1 4	11 50	5 3	7 22
9		7 58	4 2	22 2	4 50	morn	5 51	7 47
10		7 57	4 3	21 53	10 23	1 10	6 38	8 11
11		7 56	4 4	21 44	15 19	2 27	7 25	8 34
12	Old New Yea. d.	7 55	4 5	21 34	19 27	3 44	8 13	8 58
13	Hila. Cam. T. b.	7 54	4 6	21 23	22 36	4 57	9 2	9 20
14	S. aft. Epiph.	7 53	4 7	21 13	24 38	6 6	9 54	9 42
15	Oxf. Term beg.	7 52	4 8	21 2	25 25	7 6	10 45	10 3
16		7 50	4 10	20 50	24 59	☉ fets	11 36	10 23
17	Old 24th Day	7 49	4 11	20 38	23 23	4 a 24	0 a 26	10 43
18	Q. Char. b. d. k.	7 48	4 12	20 26	20 45	5 31	1 14	11 2
19	[Prisca	7 46	4 14	20 13	17 16	6 39	1 58	11 21
20	Fabian	7 45	4 15	20 0	13 6	7 47	2 41	11 38
21	S. Sun. a. Epiph.	7 44	4 16	19 47	8 27	8 56	3 22	11 55
22	Vincent [Agnes	7 42	4 18	19 33	3 28	10 4	4 2	12 11
23	Hil. Term beg.	7 41	4 19	19 19	1 n 41	11 13	4 43	12 26
24		7 39	4 21	19 4	6 52	morn	5 25	12 40
25	Conv. of St. Paul	7 38	4 22	18 49	11 54	0 24	6 9	12 54
26		7 36	4 24	18 34	16 34	1 38	6 57	13 6
27	Pr. An. Fred. b.	7 34	4 26	18 19	20 36	2 55	7 50	13 18
28	S. Sun. a. Epiph.	7 33	4 27	18 3	23 38	4 14	8 48	13 29
29		7 31	4 29	17 47	25 17	5 30	9 49	13 39
30	K. Cha. J. mar.	7 30	4 30	17 30	25 15	6 33	10 53	13 49
31		7 28	4 32	17 13	23 24	7 28	11 56	13 57
Days	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	H
	increas.	of Day.	long. ♀	long. ♀	long. ♂	long. ☉	long. ♀	fets
1	0 8	7 52	8 39	22 44	22 1	11 26	26 8 24	11 31
7	0 16	8 0	8 53	23 17	24 51	17 33	6 11 3	9 46
13	0 28	8 12	9 6	23 50	27 41	23 40	15 44	13 8 19
19	0 44	8 28	9 20	24 23	om 33	29 47	25 25	20 11 39
25	1 0	8 44	9 33	24 56	3 27	50 53	50 7	27 26 25

1798.

January.

9

Day lig.	Day lig.	Durat.	Pl. D's	h's	u's	g's	q's	g's
begins	ends	twilig.	node	latitude	latitude	latitude	latitude	latitude
1	5 59	6 1	2 6	11 52	0 s 39	1 s 18	0 n 39	1 s 7
7	5 56	6 4	2 4	11 33	0 38	1 17	0 35	0 34
13	5 52	6 8	2 2	11 14	0 37	1 15	0 32	0 n 4
19	5 46	6 14	2 0	10 55	0 37	1 14	0 28	0 48
25	5 39	6 21	1 58	10 36	0 36	1 12	0 24	1 38
○'s	D's	D's	h's	u's	g's	q's	g's	g's
longitude	long.	latitude	long.	long.	long.	long.	long.	long.
1	11 25	59	25 11 12	1 n 5	8 25 19	11 17	20 m 25	28 37
2	12 27	9	9 25 49	2 20	8 14	11 22	21 4	29 39
3	13 28	18	24 42	3 27	8 9	11 28	21 43	0 41
4	14 29	27	9 24 42	4 21	8 4	11 34	22 22	1 42
5	15 30	36	24 41	4 56	7 50	11 40	23 1	2 43
6	16 31	46	9 12 29	5 11	7 54	11 46	23 40	3 43
7	17 32	55	24 1	5 6	7 49	11 53	24 19	4 42
8	18 34	4	8 12	4 42	7 44	12 0	24 58	5 41
9	19 35	13	22 1	4 2	7 39	12 7	25 37	6 40
10	20 36	22	5 m 28	3 10	7 34	12 14	26 16	7 38
11	21 37	31	18 35	2 9	7 30	12 22	26 55	8 36
12	22 38	40	1 26	1 2	7 25	12 29	27 34	9 33
13	23 39	49	14 2	0 s 6	7 21	12 36	28 13	10 29
14	24 40	57	26 27	1 13	7 16	12 44	28 52	11 25
15	25 42	5	8 12 42	2 15	7 12	12 52	29 31	12 29
16	26 43	12	20 50	3 10	7 7	13 0	0 10	13 16
17	27 44	19	2 51	3 57	7 3	13 8	0 49	14 8
18	28 45	26	14 48	4 32	6 58	13 16	1 28	15 2
19	29 46	31	26 41	4 55	6 54	13 24	2 7	15 56
20	0 47	35	8 12 32	5 6	6 49	13 33	2 46	16 49
21	1 48	39	20 24	5 3	6 45	13 41	3 25	17 41
22	2 49	41	2 19	4 48	6 41	13 50	4 4	18 32
23	3 50	42	14 22	4 19	6 36	13 50	4 43	19 22
24	4 51	41	26 35	3 39	6 32	14 8	5 23	20 10
25	5 52	40	9 8 5	2 47	6 28	14 17	6 22	20 56
26	6 53	37	21 55	1 45	6 24	14 27	6 41	21 42
27	7 54	32	5 11 0	0 36	6 21	14 36	7 20	22 28
28	8 55	27	18 53	0 n 38	6 17	14 46	7 59	23 13
29	9 56	20	3 26 6	1 51	6 14	14 55	8 38	23 57
30	10 57	11	17 46	3 0	6 10	15 5	9 17	24 40
31	11 58	2	2 2 47	3 57	6 7	15 15	9 56	25 22
u's	g's	q's	g's	h's	u's	g's	q's	g's
sets	rises	sets	sets	declin.	declin.	declin.	declin.	declin.
1	0 m 23	3 m 50	8 a 10	5 a 5	22 n 34	3 n 10	17 s 15	13 s 1
7	11 a 50	3 47	8 22	5 32	22 36	3 32	18 18	10 20
13	11 28	3 43	8 31	5 49	22 39	3 50	19 16	7 35
19	11 8	3 39	8 38	5 42	22 41	4 10	20 9	4 50
25	10 47	3 35	8 44	5 0	22 43	4 32	20 56	2 6

The LUNATIONS.

Full Moon the 1st day, at 26 minutes past 3 morning.
 Last quarter the 7th day, at 16 minutes past 7 afternoon.
 New Moon the 15th day, at 45 minutes past 7 afternoon.
 First quarter the 23d day, at 44 minutes past 8 afternoon.

M D	Sundays & othe. remark. days.	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽rises & sets	☽ south	Clock bef. ☉	
1		7 26	4 34	16 s 56	19 n 51	☽ rises	morn	14 5	
2	Purif. or Candi.	7 25	4 35	16 39	14 56	6 a 28	0 55	14 12	
3	Blase.	7 23	4 37	16 21	9 8	7 58	1 53	14 18	
4	Septuagesima S.	7 21	4 39	16 3	2 56	9 24	2 47	14 23	
5	Agatha	7 19	4 41	15 45	3 17	10 47	3 37	14 27	
6		7 18	4 42	15 26	9 8	morn	4 26	14 31	
7		7 16	4 44	15 8	14 22	0 8	5 15	14 34	
8		7 14	4 46	14 49	18 46	1 27	6 4	14 36	
9		7 12	4 48	14 29	22 10	2 43	6 54	14 37	
10		7 10	4 50	14 10	24 26	3 54	7 45	14 38	
11	Sexagesim. Sun.	7 9	4 51	13 50	25 29	4 57	8 37	14 37	
12	Term ends	7 7	4 53	13 30	25 17	5 51	9 28	14 36	
13	Old Candlem.d.	7 5	4 55	13 10	23 55	6 32	10 18	14 35	
14	Valentine	7 3	4 57	12 49	21 30	7 5	11 7	14 32	
15		7 1	4 59	12 29	18 11	☽ sets	11 53	14 29	
16		6 59	5 1	12 8	14 8	5 a 33	0 a 36	14 25	
17		6 57	5 3	11 47	9 33	6 43	1 18	14 21	
18	Quing. Shro. S.	6 55	5 5	11 26	4 36	7 52	1 59	14 15	
19		6 53	5 7	11 4	0 n 33	9 2	2 40	14 9	
20	Shrove Tuesday	6 52	5 8	10 43	5 44	10 12	3 21	14 3	
21	Ash Wednesday	6 50	5 10	10 21	10 47	11 23	4 4	13 55	
22		6 48	5 12	9 59	15 30	morn	4 50	13 47	
23	[A.F.b.	6 46	5 14	9 37	19 39	0 38	5 40	13 38	
24	St. Matthias. Pr.	6 44	5 16	9 15	22 56	1 54	6 34	13 29	
25	☉ Sun. in Lent	6 42	5 18	8 53	25 2	3 11	7 32	13 19	
26		6 40	5 20	8 30	25 40	4 18	8 33	13 9	
27		6 38	5 22	8 8	24 35	5 15	9 36	12 58	
28	Ember Week	6 36	5 24	7 45	21 47	6 0	10 37	12 46	
Days	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ☿	Helioc. long. ♂	Helioc. long. ☾	Helioc. long. ♀	Helioc. long. ☿	h sets
1	1 24	9 8	9 45	25 34	6 m 51	12 59	16 28	4 m 20	5 m 39
7	1 41	9 28	10 22	26 7	9 48	13 3	16 12	0 6	5 13
13	2 6	9 50	10 16	26 40	12 46	25 7	5 57	21 42	4 49
19	2 30	10 14	10 29	27 13	15 47	1 m 10	15 42	10 m 33	4 26
25	2 52	10 36	10 43	27 46	18 48	7 12	25 28	27 49	4 2

1798.

February.

11

Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1 5 30	6 29	1 55	10 II 14	0 s 35	1 s 11	0 n 19	2 n 43	3 n 33
7 5 22	6 38	1 54	9 55	0 34	1 9	0 15	3 45	2 40
13 5 12	6 48	1 53	9 36	0 33	1 8	0 10	4 51	1 28
19 5 1	6 59	1 52	9 16	0 32	1 7	0 4	5 59	0 19
25 4 50	7 10	1 52	8 57	0 31	1 6	0 s 1	7 4	0 s 39

☉'s longitude	☽'s long.	☽'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1 12 58 51	18 Ω 5	4 n 39	6 Ω 3	15 ♀ 25	10 ♀ 35	26 ♀ 3	1 49
2 13 59 39	3 m 24	5 1	6 0	15 35	11 14	26 42	0 58
3 15 0 26	18 34	5 1	5 56	15 46	11 53	27 20	0 15
G 16 1 12	3 26	4 41	5 58	15 56	12 32	27 57	29 39
5 17 1 56	17 53	4 3	5 50	16 7	13 11	28 32	29 11
6 18 2 40	1 m 51	3 12	5 47	16 17	13 50	29 6	28 53
7 19 3 23	15 22	2 11	5 44	16 28	14 29	29 38	28 43
8 20 4 4	28 27	1 6	5 41	16 39	15 8	0 ♀ 8	28 D 40
9 21 4 45	11 10	0 s 2	5 38	16 50	15 47	0 37	28 44
10 22 5 25	23 36	1 7	5 36	17 1	16 26	1 5	28 56
G 23 6 3	5 49	2 8	5 33	17 12	17 5	1 31	29 14
12 24 6 40	17 53	3 3	5 30	17 23	17 44	1 56	29 37
13 25 7 16	29 51	3 49	5 28	17 34	18 23	2 19	0 6
14 26 7 51	11 45	4 24	5 26	17 46	19 2	2 40	0 40
15 27 8 24	23 38	4 48	5 24	17 57	19 41	2 59	1 18
16 28 8 55	5 30	4 59	5 22	18 9	20 20	3 15	2 0
17 29 9 25	17 23	4 57	5 20	18 21	20 59	3 29	2 46
G 30 0 9 52	29 18	4 42	5 18	18 33	21 38	3 41	3 36
19 1 10 19	11 16	4 15	5 16	18 45	22 17	3 51	4 29
20 2 10 43	23 22	3 36	5 14	18 57	22 56	3 59	5 25
21 3 11 5	5 36	2 47	5 13	19 9	23 35	4 4	6 24
22 4 11 25	18 4	1 48	5 11	19 21	24 14	4 R 6	7 26
23 5 11 43	0 II 50	0 43	5 10	19 34	24 53	4 6	8 30
24 6 11 59	13 57	0 26	5 9	19 46	25 32	4 5	9 36
G 7 12 12	27 26	1 36	5 8	19 58	26 10	4 2	10 45
26 8 12 24	11 30	2 43	5 7	20 10	26 49	3 56	11 56
27 9 12 34	25 59	3 41	5 6	20 23	27 28	3 47	13 9
28 10 12 41	0 53	4 26	5 5	20 35	28 7	3 35	14 23

☽'s sets	♂'s rises	♀'s sets	♂'s rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1 10 a 24	3 m 30	8 a 4	6 m 29	22 n 45	4 n 59	21 s 45	0 n 55	16 s 19
7 10 7	3 27	8 46	6 0	22 47	5 25	22 19	3 18	17 50
13 9 49	3 23	8 42	5 54	22 49	5 52	22 48	5 22	18 44
19 9 34	3 20	8 30	5 52	22 50	6 19	23 10	7 1	18 51
25 9 17	3 15	8 13	5 53	22 51	6 48	23 24	8 5	18 11

The LUNATIONS.

Full Moon the 2d day, at 18 minutes past 1 afternoon.
 Last quarter the 9th day, at 53 minutes past 9 morning.
 New Moon the 17th day, at 0 minutes past 2 afternoon.
 First quarter the 25th day, at 15 minutes past 8 morning.
 Full Moon the 31st day, at 40 minutes past 10 night.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾rises & sets	☾ South	Clock bef. ☉	
1	David	6 34	5 26	7 s 22	17 n 26	6 m 34	11 a 36	12 34	
2	Chad	6 32	5 28	6 59	11 54	☾ rises	morn	12 21	
3		6 30	5 30	6 36	5 39	6 a 59	0 32	12 8	
4	2 Sund. in Lent	6 28	5 32	6 13	0 s 49	8 22	1 26	11 54	
5		6 26	5 34	5 50	7 6	9 48	2 17	11 40	
6		6 24	5 36	5 27	12 50	11 11	3 8	11 26	
7	Perpetua	6 22	5 38	5 3	17 43	morn	3 59	11 11	
8		6 20	5 40	4 40	21 33	0 32	4 51	10 56	
9		6 18	5 42	4 17	24 12	1 48	5 43	10 40	
10		6 16	5 44	3 53	25 34	2 56	6 36	10 24	
11	3 Sund. in Lent	6 14	5 46	3 30	25 40	3 54	7 29	10 8	
12	Gregory	6 12	5 48	3 6	24 33	4 38	8 20	9 52	
13		6 10	5 50	2 42	22 21	5 14	9 9	9 35	
14		6 8	5 52	2 19	19 12	5 39	9 56	9 13	
15		6 6	5 54	1 55	15 17	6 0	10 40	9 1	
16		6 4	5 56	1 31	10 46	6 17	11 23	8 44	
17	St. Patrick	6 2	5 58	1 8	5 50	☾ sets	0 a 4	8 26	
18	4 or Midl. Sund.	6 0	6 0	0 44	0 38	6 a 58	0 45	8 8	
19	[Edw. K.W.S.]	5 58	6 2	0 20	4 n 37	8 7	1 26	7 50	
20		5 56	6 4	0 n 4	9 47	9 20	2 8	7 32	
21	Benedict	5 54	6 6	0 27	14 38	10 34	2 53	7 14	
22		5 52	6 8	0 51	18 56	11 48	3 41	6 53	
23		5 50	6 10	1 15	22 26	morn	4 33	6 37	
24	[Lady Day]	5 48	6 12	1 38	24 51	1 5	5 29	6 18	
25	5 Sund. in Lent	5 46	6 14	2 2	25 54	2 15	6 28	6 0	
26		5 44	6 16	2 25	25 23	3 15	7 29	5 41	
27		5 42	6 18	2 49	23 14	4 4	8 29	5 22	
28		5 40	6 20	3 12	19 32	4 41	9 28	5 4	
29		5 36	6 21	3 35	14 33	5 11	10 24	4 45	
30	Cam. Ter. ends	5 37	6 23	3 59	8 37	5 30	11 17	4 26	
31	Oxf. Ter. ends	5 36	6 25	4 22	2 10	☾ rises	morn	4 8	
☉ Days	Day increaf.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ⊖	Helioc. long. ♀	Helioc. long. ♀	h sets
1	3 18	10 52	10 52	28 8	20 51	11 13	11 58	8 53	3 m 47
7	3 32	11 16	11 16	28 41	23 55	17 13	11 43	25 23	3 25
13	3 56	11 40	11 18	29 14	27 23	12 21	12 27	12 28	3 3
19	4 20	12 4	11 32	29 46	0 11	29 9	1 10	0 54	2 42
25	4 44	12 28	11 45	0 8	3 22	5 6	10 52	21 41	2 21

1798.

March.

13

Day	lig.	Day	lig.	Durat.	Pl.	D's	h's	U's	♂'s	♀'s	♂'s
	begins	ends	twilig.		node	latitude	latitude	latitude	latitude	latitude	latitude
1	4 43	7 17	1 51	8 II 45	0 s 31	1 8 5	0 s 4	7 n 42	1 s 11		
7	4 30	7 30	1 52	8 26	0 30	1 4 0	11 8	24 1	48		
13	4 17	7 43	1 53	8 7	0 29	1 4 0	18 8	38 2	10		
19	4 4	7 56	1 54	7 4	0 28	1 3 0	26 8	19 2	17		
25	3 50	8 10	1 56	7 28	0 27	1 2 0	34 7	29 2	7		
	O's longitude			D's long.	D's latitude	h's long.	U's long.	♂'s long.	♀'s long.	♂'s long.	
1	X 11	12 46	26 Ω 5	4 n 53	5 5	20 43	28 1 45	3 19	15 39		
2	12 12	50	11 11 26	5 0	5 4	21 29	24 3	1 16	57		
3	13 12	52	26 44	4 45	5 4	21 14	cl 3	2 41	18 17		
4	14 12	52	11 46	4 10	5 4	21 27	0 42	2 19	19 38		
5	15 12	49	26 26	3 20	5 D 4	21 40	1 21	1 55	21 0		
6	16 12	45	10 m 36	2 18	5 4	21 53	2 0	1 30	22 24		
7	17 12	40	24 16	1 11	5 4	22 6	2 38	1 3	23 50		
8	18 12	33	7 28	0 2	5 4	22 19	3 17	0 32	25 13		
9	19 12	24	20 14	1 s 6	5 4	22 32	3 56	0 0	26 45		
10	20 12	14	27 40	2 8	5 5	22 46	4 34	29 27	28 13		
G	21 12	2	14 51	3 2	5 5	22 59	5 13	28 53	29 43		
12	22 11	48	26 51	3 49	5 6	23 12	5 52	28 18	1 X 15		
13	23 11	33	8 44	4 24	5 6	23 26	6 30	27 41	2 48		
14	24 11	16	20 35	4 48	5 7	23 39	7 9	27 4	4 22		
15	25 10	58	2 X 26	5 0	5 8	23 54	7 48	26 27	5 58		
16	26 10	38	14 19	4 58	5 9	24 7	8 26	25 49	7 39		
17	27 10	15	26 15	4 44	5 10	24 21	9 5	25 11	9 13		
G	28 9	50	8 17	4 17	5 11	24 34	9 44	24 34	10 52		
19	29 9	23	20 25	3 37	5 13	24 47	10 22	23 57	12 33		
20	30 8	54	2 8 40	2 48	5 14	25 1	11 1	23 21	14 15		
21	1 8	23	15 4	1 49	5 16	25 14	11 39	22 46	15 58		
22	2 7	49	27 39	0 45	5 18	25 28	12 17	22 13	17 42		
23	3 7	13	10 II 29	0 n 24	5 20	25 42	12 55	21 41	19 28		
24	4 6	35	23 36	1 32	5 22	25 56	13 33	21 11	21 15		
G	5 5	54	7 26 4	2 38	5 24	26 10	14 11	20 43	23 4		
26	6 5	11	20 55	3 36	5 26	26 24	14 50	20 17	24 54		
27	7 4	25	5 Ω 9	4 22	5 28	26 38	15 28	19 53	26 45		
28	8 3	37	19 45	4 53	5 31	26 52	16 6	19 31	28 37		
29	9 2	47	4 m 38	5 5	5 33	27 6	16 45	19 11	0 31		
30	10 1	55	19 43	4 56	5 36	27 20	17 23	18 53	2 26		
31	11 1	0	4 48	4 27	5 38	27 34	18 1	18 37	4 23		
	U's	♂'s	♀'s	♂'s	h's	U's	♂'s	♀'s	♂'s		
	fers	rises	fers	rises	declin.	declin.	declin.	declin.	declin.		
1	9 a 8	3 m 13	7 a 56	5 m 52	22 n 51	7 n 8	23 s 33	8 n 23	17 s 17		
7	8 52	3 8	7 20	5 51	22 52	7 38	23 37	8 7	15 17		
13	8 38	3 3	6 42	5 40	22 53	8 9	23 37	7 0	12 31		
19	8 24	2 57	5 53	5 46	22 54	8 39	23 30	5 14	8 57		
25	8 9	2 49	5 11	5 41	22 54	9 9	23 16	3 13	4 42		

The LUNATIONS.

Last quarter the 8th day, at 31 minutes past 2 morning.
 New Moon the 16th day, at 20 minutes past 6 morning.
 First quarter the 23d day, at 8 minutes past 4 afternoon.
 Full Moon the 30th day, at 8 minutes past 8 morning.

M	Sundays & other D remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock bef. ☉	
G	6 of Palm Sun.	5 33	6 27	4 n 45	4 s 20	7 a 22	o m 10	3 49	
2		5 31	6 29	5 8	10 30	8 50	1 1	3 31	
3	Richard	5 29	6 31	5 31	15 58	10 14	1 53	3 13	
4	Ambrose	5 27	6 33	5 54	20 24	11 37	2 46	2 55	
5	Old L.D. Maun.	Thurs.	6 35	6 17	23 37	morn	3 40	2 37	
6	Good Friday	5 23	6 37	6 39	25 30	0 52	4 35	2 19	
7		5 21	6 39	7 2	26 1	1 55	5 29	2 2	
Q	Easter Day	5 19	6 41	7 24	25 14	2 46	6 22	1 45	
9	Easter Monday	5 17	6 43	7 46	23 17	3 24	7 12	1 28	
10	Easter Tuesday	5 15	6 45	8 9	20 21	3 53	8 0	1 12	
11		5 13	6 47	8 31	16 36	4 16	8 46	0 55	
12		5 11	6 49	8 53	12 12	4 33	9 29	0 39	
13		5 9	6 51	9 14	7 19	4 49	10 11	0 24	
14		5 7	6 53	9 36	2 8	5 2	10 52	0 8	
Q	Low Sunday	5 5	6 55	9 57	3 n 12	5 16	11 33	0 a f.	
16		5 4	6 56	10 19	8 29	☾ sets	0 a 14	0 21	
17		5 2	6 58	10 40	13 32	8 a 31	0 58	0 36	
18	Ox. & Ca. T. beg.	5 c	7 0	11 1	18 5	9 47	1 46	0 49	
19	Alphege	4 58	7 2	11 21	21 51	11 4	2 37	1 3	
20		4 56	7 4	11 42	24 34	morn	3 52	1 16	
21		4 54	7 6	12 2	25 58	0 16	4 30	1 28	
Q	2 Su. aft. Easter	4 52	7 8	12 22	25 51	1 20	5 29	1 41	
23	St. George	4 50	7 10	12 42	24 9	2 11	6 28	1 52	
24	{ Ma. b.	4 49	7 11	13 2	20 57	2 50	7 26	2 4	
25	St. Mark. Prse.	Ter. be.	7 13	13 22	16 27	3 19	8 21	2 15	
26		4 45	7 15	13 41	16 56	3 42	9 13	2 25	
27		4 43	7 17	14 0	4 47	4 1	10 4	2 35	
28		4 41	7 19	14 19	1 s 38	4 18	10 54	2 44	
Q	3 S. af. Easter	4 40	7 20	14 38	7 56	4 33	11 45	2 53	
30		4 38	7 22	14 56	13 45	☾ rises	morn	3 2	
Days	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h sets
1	5 10	12 54	12 50	1 08	58 7 ↑	7 12	22 10	20 30	1 m 57
7	5 34	13 18	12 14	1 30	10 22	17 54	11 48	20 31	1 36
13	5 58	13 42	12 28	2 3	13 39	23 46	11 25	25 40	1 16
19	6 20	14 4	12 41	2 36	16 58	29 38	21 0	25 22	0 56
25	6 42	14 26	12 55	3 9	20 19	5 m 28	0 ↑	34 8	0 35

1798.

April.

15

	Daylig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	s's latitude	f's latitude	s's latitude
1	3 32	8 28	2 0	7 II 6	0 s 26	1 s 1	0 s 44	6 n 7	1 s 34
7	3 16	8 44	2 4	6 47	0 25	1 1	0 53	4 48	0 44
13	3 0	9 0	2 9	6 28	0 24	1 1	1 3	3 31	0 n 17
19	2 43	9 17	2 14	6 9	0 23	1 0	1 13	2 21	1 22
25	2 26	9 34	2 20	5 50	0 22	1 0	1 24	1 18	2 12
	o's longitude		D's long.	D's latitude	h's long.	u's long.	s's long.	f's long.	s's long.
1	12 0	3	19 43	3 n 39	5 41	27 49	18 39	18 23	6 22
2	12 59	4	4 21	2 38	5 44	28 3	19 17	18 11	8 20
3	13 58	4	18 35	1 28	5 47	28 17	19 55	18 2	10 20
4	14 57	2	2 21	0 15	5 50	28 31	20 33	17 56	12 21
5	15 55	58	15 40	0 56	5 53	28 45	21 11	17 D 54	14 23
6	16 54	52	28 33	2 2	5 56	28 59	21 49	17 55	16 27
7	17 53	41	1 4	3 1	6 0	29 14	22 27	17 58	18 32
8	18 52	35	23 18	3 50	6 4	29 28	23 5	18 3	20 38
9	19 51	24	5 20	4 28	6 7	29 42	23 43	18 10	22 44
10	20 50	11	17 14	4 54	6 11	29 57	24 20	18 19	24 50
11	21 48	57	29 5	5 7	6 14	0 8	24 58	18 30	26 56
12	22 47	41	10 56	5 7	6 18	0 25	25 36	18 42	29 3
13	23 46	23	22 52	4 54	6 22	0 40	26 13	18 56	1 8 9
14	24 45	4	4 54	4 27	6 26	0 54	26 51	19 12	3 14
15	25 43	43	17 4	3 49	6 30	1 8	27 28	19 30	5 18
16	26 42	20	29 24	2 59	6 34	1 23	28 5	19 50	7 20
17	27 40	55	11 54	2 0	6 38	1 37	28 42	20 13	9 20
18	28 39	27	24 34	0 53	6 42	1 51	29 15	20 38	11 19
19	29 37	58	7 11	0 n 17	6 47	2 6	29 56	21 5	13 16
20	30 36	27	20 33	1 27	6 51	2 20	30 33	21 33	15 10
21	1 34	53	3 52	2 34	6 56	2 34	1 10	22 3	17 1
22	2 33	17	17 26	3 34	7 1	2 49	1 46	22 34	18 48
23	3 31	39	1 17	4 22	7 6	3 3	2 23	23 6	20 3
24	4 29	59	15 23	4 56	7 11	3 17	3 0	23 39	22 13
25	5 28	17	29 43	5 12	7 16	3 32	3 36	24 13	23 50
26	6 26	32	14 15	5 8	7 21	3 46	4 13	24 48	25 23
27	7 24	46	28 54	4 45	7 26	4 0	4 49	25 26	26 52
28	8 22	58	13 34	4 3	7 31	4 15	5 26	26 4	28 18
29	9 21	8	28 7	3 5	7 36	4 20	6 2	26 43	29 39
30	10 19	16	12 28	1 56	7 41	4 43	6 30	27 24	0 11 55
	u's sets	s's rises	f's rises	s's rises	h's declin.	u's declin.	s's declin.	f's declin.	s's declin.
1	7 a 55	2 m 41	4 m 14	5 m 35	22 n 55	9 n 40	12 s 53	1 n 1	1 n 5
7	7 40	2 33	4 1	sets	22 55	10 16	22 28	0 s 21	6 35
13	7 27	2 24	3 49	7 a 35	22 55	10 46	21 58	1 9	12 8
19	7 13	2 14	3 37	8 26	22 54	11 16	21 23	1 23	17 8
25	6 57	2 3	3 27	9 10	22 54	11 46	20 44	1 0	20 53

The LUNATIONS.

Last quarter the 7^h day, at 5 minutes past 8 afternoon.
 New Moon the 15th day, at 4 minutes past 8 afternoon.
 First quarter the 22^d day, at 28 minutes past 9 afternoon.
 Full Moon the 29th day, at 15 minutes past 6 afternoon.

M	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉	
1	St. Phil. & Jam	4 36	7 24	15 n 14	18 s 43	9 a 14	om 38	3 9	
2		4 34	7 26	15 32	22 33	10 34	1 31	3 17	
3	Inven. of Cross	4 33	7 27	15 50	25 3	11 45	2 26	3 24	
4		4 31	7 29	16 7	26 7	morn	3 21	3 30	
5		4 29	7 31	16 24	25 47	0 44	4 16	3 35	
6	4 Sun. af. East.	4 27	7 33	16 41	24 12	1 27	5 9	3 40	
7	[J. Ev. A. P. L.	4 26	7 34	16 57	21 32	2 1	5 59	3 45	
8		4 24	7 36	17 14	17 59	2 26	6 46	3 49	
9		4 23	7 37	17 30	13 44	2 45	7 30	3 52	
10		4 21	7 39	17 45	8 50	3 0	8 12	3 55	
11		4 19	7 41	18 1	3 53	3 15	8 53	3 57	
12	Old May Day	4 18	7 42	18 16	1 n 27	3 27	9 33	3 58	
13	5 or Rega. Sun.	4 16	7 44	18 31	6 48	3 40	10 15	3 59	
14		4 15	7 45	18 45	12 0	3 54	10 58	3 59	
15		4 13	7 47	18 59	16 48	☾ sets	11 44	3 59	
16		4 12	7 48	19 13	20 54	8 a 53	0 a 35	3 58	
17	Ascen. Holy Th.	4 10	7 50	19 27	24 1	10 11	1 30	3 56	
18	[Prs. Wales b.	4 9	7 51	19 40	25 49	11 19	2 27	3 54	
19	Queen. Cha. bo.	Dunst.	7 52	19 53	26 5	morn	3 26	3 53	
20	☉ Sun. af. Ascen.	4 6	7 54	20 5	24 45	0 12	4 25	3 49	
21	Term ends	4 5	7 55	20 18	21 52	0 54	5 23	3 45	
22	Prs. Elizab. bo.	4 4	7 56	20 30	17 41	1 27	6 17	3 41	
23		4 2	7 58	20 41	12 29	1 48	7 9	3 36	
24	Oxford T. ends	4 1	7 59	20 52	6 36	2 8	7 59	3 31	
25		4 0	8 0	21 3	0 23	2 25	8 48	3 26	
26	Augustin	3 59	8 1	21 13	5 s 51	2 41	9 37	3 20	
27	☉ Whit Sunday	Ve. Be	8 2	21 23	11 44	2 57	10 27	3 13	
28	Whit Monday	3 57	8 3	21 33	16 58	3 16	11 19	3 6	
29	Wh. T. K. Ch. 2	3 55	8 5	21 42	21 14	☾ rises	morn	2 59	
30	Ember W. [rest.	3 54	8 6	21 51	24 16	9 a 25	0 13	2 51	
31		3 53	8 7	22 0	25 53	10 29	1 8	2 43	
Days	Day increaf.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h sets
1	7 4	14 48	13 25 8	3 8 42	23 1 42	11 17	10 1 7	9 17 4	om 15
7	7 24	15 8	13 22	4 14 27	8 17	5 19	38 4	1 11 a 50	
13	7 44	15 28	13 35	4 47 0	13 22	53 29	8 25	3 11 28	
19	8 0	15 44	13 49	5 20 4	5 28	39 8	13 38	13 34 11	8
25	8 10	16 0	14 2	5 52 7	36 4	1 26	18 7	0 1 39	10 47

1798.

May

17

M.	Day	lig.	Day	g.	Durat.	Pl.	℄'s	h's	℄'s	♂'s	♀'s	♂'s
D.	begins	ends	twilig.	node	latitude	latitude	latitude	latitude	latitude	latitude	latitude	aritud
1	2	7	9	55	2	31	5 II 31	08 22	18 0	18 36	08 24	28 36
7	1	45	10	18	2	43	5 I 12	0 21	1 0	1 48	08 22	2 25
13	1	20	10	45	3	1	4 53	0 20	1 0	2 1	1 0	1 37
19	0	48	11	20	3	27	4 34	0 20	1 0	2 15	1 32	0 13
25	All dayli. ht.				4	15	0 19	1 0	2 30	1 56	18 30	
D.	℄'s	℄'s	℄'s	h's	℄'s	♂'s	♀'s	♂'s	♀'s	♂'s	♀'s	♂'s
	longitude	long.	latitude	longit.	longit.	longit.	longit.	longit.	longit.	longit.	longit.	longit.
1	8 11	17 22	26 11 31	08 42	7 26 47	48 58	7 15	28 36	2 11	7		
7	12	15 27	10 12	08 33	7 52	5 12	7 51	28 49	3 15			
13	13	13 30	21 30	1 45	7 58	5 26	8 27	29 33	4 18			
19	14	11 32	6 25	2 49	8 4	5 41	9 3	30 17	5 15			
25	15	9 32	19 0	3 43	8 10	5 55	9 39	1 2	6 8			
31	16	7 31	1 18	4 25	8 16	6 9	10 15	1 48	6 57			
7	17	5 29	13 23	4 55	8 22	6 24	10 50	2 35	7 41			
13	18	3 26	25 20	5 12	8 28	6 38	11 26	3 23	8 20			
19	19	1 22	7 13	5 15	8 34	6 52	12 1	4 11	8 54			
25	19	59 16	19 6	5 5	8 40	7 7	12 36	5 0	9 24			
31	20	57 10	1 5	4 42	8 46	7 21	13 11	5 50	9 49			
7	21	55 2	13 12	4 6	8 52	7 35	13 46	6 41	10 8			
13	22	52 52	25 30	3 18	8 58	7 49	14 21	7 33	10 22			
19	23	50 41	8 8	2 19	9 4	8 3	14 55	8 25	10 31			
25	24	48 29	20 47	1 13	9 10	8 17	15 30	9 18	10 35			
31	25	46 16	3 14 8	0 2	9 17	8 31	16 4	10 11	10 38			
7	26	44 1	17 3	1 11	9 23	8 45	16 38	11 5	10 30			
13	27	41 45	0 26 33	2 21	9 29	8 59	17 12	11 59	10 21			
19	28	39 27	14 15	3 25	9 36	9 13	17 46	12 54	10 7			
25	29	37 8	28 7	4 17	9 42	9 27	18 20	13 48	9 49			
31	II 0	34 47	12 9	4 54	9 49	9 41	18 53	14 43	9 28			
7	1	32 25	26 19	5 14	9 56	9 55	19 27	15 39	9 3			
13	2	30 1	10 23 33	5 15	10 3	10 9	20 0	16 36	8 36			
19	3	27 35	21 49	4 57	10 10	10 23	20 33	17 34	8 6			
25	4	25 8	9 6	4 20	10 17	10 36	21 6	18 32	7 34			
31	5	22 40	23 18	3 28	10 23	10 50	21 38	19 29	7 1			
7	6	20 10	7 23	2 23	10 30	11 3	22 11	20 27	6 28			
13	7	17 39	21 18	1 11	10 37	11 17	22 43	21 25	5 54			
19	8	15 7	4 59	0 8	10 44	11 30	23 15	22 24	5 21			
25	9	12 34	18 24	1 18	10 51	11 44	23 47	23 24	4 49			
31	10	10 0	1 2	2 26	10 58	11 57	24 19	24 25	4 18			
M.	℄'s	♂'s	♀'s	♂'s	h's	℄'s	♂'s	♀'s	♂'s	♀'s	♂'s	♀'s
D.	rises	rises	rises	sets	declin.	declin.	declin.	declin.	declin.	declin.	declin.	declin.
1	4m 30	1m 51	3m 15	9a 37	22 n 53	12 n 15	20 s 2	0 s 24	23 n 9			
7	4 9	1 38	3 5	9 42	22 51	12 43	19 16	0 n 41	24 0			
13	3 48	1 24	2 54	9 30	22 50	13 11	18 28	2 52	23 37			
19	3 28	1 9	2 42	8 56	22 48	13 38	17 40	3 42	22 13			
25	3 7	0 54	2 30	8 1	22 45	14 4	16 51	5 29	20 7			

The LUNATIONS.

Last quarter the 6th day, at 38 minutes past 1 afternoon.

New Moon the 14th day, at 3 minutes past 7 morning.

First quarter the 21st day, at 47 minutes past 1 morning.

Full Moon the 28th day, at 35 minutes past 5 morning.

M	Sundays & other D remark. days.	☉ rises	☉ sets	☉'s declin.	D's declin.	D rises & sets	D South	Clock aft. ☉	
1	Nicomede	3 52	8 8	22 n 8	26 s 5	11 a 20	2 m 3	2' 34"	
2		3 52	8 8	22 16	24 55	morn	2 57	2 25	
3	Trinity Sunday	3 51	8 9	22 23	22 35	0 0	3 49	2 15	
4	K. Geo. III. b.	3 50	8 10	22 30	19 17	0 28	4 38	2 5	
5	Pr. Arn. Aug. b.	Bonita.	8 11	22 37	15 14	0 49	5 23	1 55	
6	Oxt. Term be.	3 48	8 12	22 43	10 37	1 5	6 5	1 44	
7	Corpus Christi	3 48	8 12	22 49	5 37	1 19	6 46	1 33	
8	Trin. Term be.	3 47	8 13	22 54	0 23	1 31	7 26	1 22	
9		3 46	8 14	22 59	4 n 57	1 43	8 6	1 11	
10	1 st Sun. af. Trin.	3 46	8 14	23 4	10 12	1 57	8 48	0 58	
11	St. Barnabas	3 45	8 15	23 8	15 10	2 12	9 33	0 45	
12		3 45	8 15	23 12	19 34	2 34	10 22	0 34	
13		3 44	8 16	23 16	23 5	2 59	11 15	0 22	
14		3 44	8 16	23 19	25 23	D sets	0 a 12	0 9	
15		3 44	8 16	23 21	26 10	10 a 1	1 2	0 b. 7	
16		3 43	8 16	23 23	25 15	10 49	2 13	0 17	
17	2 ^d Sun. af. Trin	3 43	8 17	23 25	22 42	11 24	3 12	0 29	
18	[St. Alban]	3 43	8 17	23 26	18 43	11 50	4 9	0 42	
19		3 43	8 17	23 27	13 40	morn	5 2	0 55	
20	Tra. Edw. KWS	3 43	8 17	23 28	7 53	0 10	5 52	1 8	
21	Longest Day	3 43	8 17	23 28	1 45	0 27	6 41	1 21	
22		3 43	8 17	23 28	4 s 25	0 43	7 29	1 34	
23		3 43	8 17	23 27	10 18	0 58	8 17	1 47	
24	3 ^d S. a. Tri. Nati.	Midf.	8 17	23 26	15 37	1 16	9 7	2 0	
25	[J. Bapt.]	3 43	8 17	23 24	20 5	1 36	9 33	2 13	
26		3 44	8 16	23 22	23 27	2 2	10 53	2 25	
27	Term ends	3 44	8 16	23 20	25 30	2 36	11 48	2 37	
28		3 44	8 16	23 17	26 9	D rises	morn	2 50	
29	St. Peter	3 45	8 15	23 18	25 25	9 a 51	0 42	3 1	
30		3 45	8 15	23 10	23 25	10 22	1 34	3 13	
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	increas.	of day	long. ♀	long. ♀	long. ♂	long. ☉	long. ♀	long. ♂	sets
1	8 32	16 16	14 25	19 6	8 31	11 45	11 7	2 13	10 a 22
7	8 40	16 24	14 32	7 3	15 20	16 52	8 40	6 44	10 0
13	8 48	16 32	14 45	7 36	18 58	22 36	18 9	24 38	9 37
19	8 50	16 34	14 58	8 9	22 36	28 19	27 39	14 31	9 15
25	8 50	16 34	15 12	8 41	26 17	4 3	7 9	7 33	8 53

1798.

June.

19

M	Daylig. begins	Daylig. ends	Durat. twilg.	Pl. C's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1				3 II 52	0 s 18	1 s 0	2 s 48	2 s 17	3 s 16
7				3 33	0 18	1 0	3 5	2 29	4 5
13	All	day	light.	3 14	0 17	1 0	3 23	2 35	4 10
19				2 55	0 16	1 1	3 41	2 37	3 39
25				2 36	0 16	1 1	4 0	2 35	2 42

M	☉'s longitude	☽'s long.	☽'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
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1	II 11	7 25	14 21	3 s 25	11 5	12 8	11 24	5 25	26 3	II 49
2	12	4 50	26 54	4 12	11 12	12 24	25 2	26 27	3 23	
8	13	2 14	9 12	4 47	11 19	12 38	25 53	27 28	3 0	
14	13	59 37	21 18	5 9	11 27	12 51	26 23	28 29	2 41	
20	14	56 52	32 16	5 16	11 34	13 4	26 54	29 30	2 26	
26	15	54 21	15 10	5 10	11 41	13 17	27 25	0 8	31 2	14
32	16	51 43	21 4	4 51	11 49	13 30	27 55	1 33	2 5	
38	17	49 5	9 4	4 19	11 56	13 43	28 24	2 35	2 D	1
44	18	46 26	21 13	3 36	12 3	13 56	28 53	3 37	2 2	
50	19	43 46	3 8	2 41	12 11	14 9	29 22	4 40	2 8	
56	20	41 6	16 15	1 37	12 18	14 22	29 51	5 43	2 18	
62	21	38 26	29 14	0 27	12 25	14 34	0 20	6 46	2 32	
68	22	35 45	12 II 33	0 n 46	12 33	14 47	0 49	7 50	2 51	
74	23	33 4	26 11	1 59	12 40	15 0	1 17	8 54	3 14	
80	24	30 22	10 26	3 5	12 48	15 12	1 45	9 58	3 42	
86	25	27 39	24 16	4 2	12 55	15 25	2 12	11 2	4 16	
92	26	24 56	8 35	4 44	13 3	15 37	2 39	12 6	4 54	
98	27	22 13	22 59	5 8	13 10	15 50	3 6	13 10	5 35	
104	28	19 28	7 21	5 13	13 18	16 2	3 32	14 15	6 20	
110	29	16 43	21 40	4 59	13 26	16 15	3 58	15 20	7 9	
116	30	13 57	5 51	4 27	13 33	16 27	4 23	16 25	8 3	
122	1	11 10	19 53	3 39	13 41	16 39	4 48	17 30	9 2	
128	2	8 23	3 45	2 38	13 48	16 51	5 13	18 35	10 3	
134	3	5 35	17 25	1 29	13 56	17 3	5 37	19 40	11 9	
140	4	2 46	0 54	0 17	14 4	17 15	6 1	20 46	12 18	
146	4	59 57	14 10	0 s 56	14 11	17 27	6 25	21 52	13 31	
152	5	57 8	27 13	2 4	14 19	17 39	6 48	22 58	14 48	
158	6	54 19	10 5	3 4	14 27	17 51	7 11	24 4	16 10	
164	7	51 30	22 41	3 55	14 35	18 2	7 33	25 10	17 35	
170	8	48 40	5 6	4 33	14 43	18 14	7 54	26 16	19 3	

M	u's rises	δ's rises	♀'s rises	♂'s rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	2 m 42	0 m 35	2 m 16	3 m 5	22 n 42	14 n 34	15 s 54	7 n 43	17 n 44
7	2 20	0 18	2 5	3 27	22 39	14 57	15 6	9 42	16 36
13	1 58	0 0	1 53	3 6	22 35	15 20	14 21	11 41	16 40
19	1 36	II 2	1 40	2 48	22 32	16 41	13 39	13 37	17 48
25	1 14	II 22	1 33	2 37	22 28	16 1	13 2	15 28	19 37

The LUNATIONS.

Left quarter the 6th day, at 30 minutes past 6 morning.
 New Moon the 13th day, at 52 minutes past 3 afternoon.
 First quarter the 20th day, at 48 minutes past 6 morning.
 Full Moon the 27th day, at 35 minutes past 6 afternoon.

M	Sundays & other	☉	☉	☉'s	☉'s	☉ rises	☉	Clock
D	remark. days	rises	sets	declin.	declin.	& sets	South	bef. ☉
1	4 Sun. af. Trin.	3 46	8 14	23 n 6	20 s 23	10 a 46	2 m 24	3 25
2	Visita. of V.M.	3 46	8 14	23 2	16 31	11 4	3 11	3 36
3	Cam. C. Do. d. b.	3 47	8 13	22 57	12 3	11 19	3 54	3 47
4	Transf. St. Mar.	3 47	8 13	22 52	7 10	11 32	4 36	3 58
5	Old Midsumme	3 48	8 12	22 46	2 11	11 45	5 16	4 8
6	Camb. Ter. ends	3 49	8 11	22 40	3 n 15	11 57	5 56	4 18
7	Thomas à Beck.	3 49	8 11	22 34	8 29	morn	6 36	4 28
8	5 Sun. af. Trin.	3 50	8 10	22 27	13 30	0 11	7 19	4 38
9	Oxford Aft	3 51	8 9	22 20	18 4	0 29	8 6	4 47
10		3 52	8 8	22 12	21 55	0 50	8 56	4 58
11		3 53	8 7	22 5	24 42	1 21	9 51	5 4
12		3 54	8 6	21 56	26 4	2 4	10 51	5 11
13		3 55	8 5	21 48	25 46	☉ sets	11 53	5 19
14	Oxfo. Ter. e.	3 56	8 4	21 38	23 42	9 a 17	0 a 55	5 26
15	6 Sun. af. Trin	3 57	8 3	21 29	20 2	9 47	1 54	5 32
16	[Swithin	3 58	8 2	21 19	15 6	10 10	2 50	5 38
17		3 59	8 1	21 9	9 19	10 29	3 43	5 43
18		4 0	8 0	20 58	3 6	10 45	4 33	5 48
19		4 1	7 59	20 48	3 s 11	11 0	5 21	5 52
20	Margaret	4 2	7 57	20 36	9 11	11 17	6 10	5 56
21		4 4	7 56	20 25	14 38	11 37	7 0	5 59
22	7 Sun. af. Trin.	4 5	7 55	20 13	19 15	morn	7 51	6 2
23	[Mary Mag.	4 7	7 53	20 1	22 50	0 0	8 44	6 4
24		4 8	7 52	19 48	25 10	0 32	9 37	6 5
25	St. James	4 9	7 51	19 35	26 9	1 14	10 32	6 6
26	S. Anne	4 11	7 49	19 22	25 45	2 4	11 25	6 6
27		4 12	7 48	19 8	24 5	☉ rises	morn	6 5
28		4 14	7 46	18 54	21 19	3 a 45	0 16	6 4
29	8 Sun. af. Trin.	4 15	7 45	18 40	17 39	9 7	1 3	6 3
30		4 17	7 43	18 26	13 19	9 23	1 48	6 1
31		4 18	7 42	18 11	8 30	9 37	2 50	5 57
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.
D	decreas.	of day	long. ♀	long. ♂	long. ♂	long. ☉	long. ♀	long. ☉
1	0 6	16 28	15 25	9 8	22 59	9 46	16 40	5 0
7	0 12	16 22	15 39	9 47	22 42	15 29	16 12	5 0
13	0 24	16 10	15 52	10 19	21 26	15 12	15 44	5 0
19	0 36	15 58	16 6	10 52	11 12	14 56	15 18	5 0
25	0 52	15 42	16 19	11 25	14 58	14 40	15 52	5 0

1798.

July.

21

M	Day lig.	Day lig.	Durat.	Pl.	D's	h's	u's	♂'s	♀'s	♂'s
D	begins	ends	twilig.	node	latitude	latitude	latitude	latitude	latitude	latitude
1				2 II 17	0 s 15	1 s 1	4 s 20	2 s 29	1 s 31	
7	All	day	light.	1 58	0 15	1 2	4 4	2 20	0 16	
13				1 39	0 14	1 2	5 1	2 8	0 n 49	
19				1 20	0 14	1 3	5 21	1 53	1 32	
25	0 45	11 10	3 20	1 1	0 13	1 4	5 41	1 37	1 47	
M	O's		D's	D's	h's	u's	♂'s	♀'s	♂'s	
D	longitude		long.	latitude	long.	long.	long.	long.	long.	
G	9	45 50	17 19	4 s 58	14 51	18 25	8 15	27 23	20 13	35
2	10	43 1	29 23	5 9	14 59	18 37	8 36	28 30	21 10	
3	11	40 12	11 20	5 7	15 7	18 48	8 56	29 37	23 49	
4	12	37 24	23 12	4 52	15 15	18 59	9 16	30 44	25 32	
5	13	34 36	5 6	4 24	15 23	19 10	9 35	31 51	27 18	
6	14	31 49	17 4	3 45	15 31	19 21	9 53	32 58	29 7	
7	15	29 1	29 12	2 55	15 38	19 32	10 11	34 5	31 58	
G	16	26 15	11 34	1 55	15 46	19 43	10 29	35 13	32 52	
9	17	23 29	24 16	0 49	15 54	19 53	10 46	36 21	34 49	
10	18	20 43	7 12	0 n 21	16 1	20 4	11 2	37 29	36 49	
11	19	17 58	20 50	1 33	16 9	20 14	11 17	38 37	38 51	
12	20	15 14	4 45	2 41	16 17	20 25	11 33	39 45	40 54	
13	21	12 29	19 2	3 41	16 24	20 35	11 47	40 53	42 59	
14	22	9 46	3 37	4 27	16 32	20 45	12 0	41 1	44 5	
G	23	7 2	18 23	4 57	16 40	20 55	12 13	42 10	46 12	
16	24	4 19	3 12	5 7	16 48	21 5	12 25	43 18	48 20	
17	25	1 36	17 56	4 56	16 56	21 15	12 37	44 27	49 28	
18	25	58 53	2 27	4 27	17 4	21 24	12 48	45 35	50 36	
19	26	56 11	16 43	3 41	17 11	21 34	12 58	46 44	51 44	
20	27	53 29	0 41	2 43	17 19	21 43	13 7	47 53	52 51	
21	28	50 46	14 22	1 36	17 27	21 52	13 16	48 20	53 58	
G	29	48 5	27 46	0 26	17 34	22 1	13 24	49 21	54 4	
23	0 45	23 10	4 54	0 s 44	17 42	22 10	13 31	50 22	55 9	
24	1 42	42 23	49 1	51 17	50 22	19 13	38 23	51 29	56 12	
25	2 40	2 6	33 3	51 17	57 22	28 13	44 24	52 38	57 14	
26	3 37	21 19	5 3	41 18	5 22	36 13	49 25	53 47	58 15	
27	4 34	42 1	28 4	21 18	12 22	45 13	53 26	54 57	59 14	
28	5 32	4 13	42 4	47 18	20 22	53 13	56 28	57 7	60 12	
G	6 29	26 25	48 5	1 18	27 23	2 13	59 29	58 17	61 8	
30	7 26	49 7	47 5	1 18	35 23	10 14	1 0	59 27	62 3	
31	8 24	13 19	40 4	48 18	42 23	18 14	3 1	60 37	63 56	
M	u	♂	♀	♂	h's	u's	♂'s	♀'s	♂'s	
D	rises	rises	rises	rises	declin.	declin.	declin.	declin.	declin.	
1	0 m 52	11 a 3	1 m 25	2 m 35	22 n 23	16 n 21	12 s 30	17 n 11	21 n 37	
7	0 30	10 44	1 19	2 48	22 19	16 39	12 5	18 42	23 12	
13	0 8	10 24	1 13	3 10	22 14	16 55	11 47	19 20	23 39	
19	11 a 44	10 4	1 11	sets	22 8	17 10	11 38	21 1	22 32	
25	11 22	9 43	1 11	8 a 18	22 3	17 23	11 38	21 45	19 57	

The LUNATIONS.

Last quarter the 4th day, at 16 minutes past 10 night.

New Moon the 11th day, at 28 minutes past 11 night.

First quarter the 18th day, at 6 minutes past 2 afternoon.

Full Moon the 26th day, at 28 minutes past 9 morning.

M	Sundays & other	☉	☉	☉'s	☉'s	☉ rises	☉	Clock
D	remark. days	rises	sets	declin.	declin.	& sets	South	bef. ☉
1	Lammas Day	4 20	7 40	17 n 56	3 s 24	9 a 49	3 m 11	5 53
2		4 21	7 39	17 40	1 n 49	10 2	3 51	5 50
3		4 23	7 37	17 25	7 2	10 16	4 31	5 45
4		4 24	7 36	17 9	12 4	10 32	5 13	5 40
5	☉ Sun. af. Trin.	4 26	7 34	16 53	16 43	10 52	5 57	5 34
6	Transfiguration	4 28	7 32	16 36	20 40	11 17	6 45	5 28
7	Mrs. Amelia bor.	4 29	7 31	16 19	23 54	11 51	7 36	5 21
8	[Na. of Jesus	4 31	7 29	16 2	25 49	morn	8 33	5 14
9		4 33	7 27	15 45	26 11	0 43	9 34	5 6
10	Lawrence	4 35	7 25	15 27	24 49	1 50	10 36	4 57
11	Duc. Brunw. b.	Do. d. e.	7 24	15 10	21 43	☉ fts	11 38	4 48
12	☉ S. a. Tr. Pr. of	O. Lam	7 22	14 51	17 7	8 a 11	0 a 37	4 39
13	[Wales b.	4 40	7 20	14 33	11 25	8 33	1 33	4 28
14		4 42	7 18	14 15	5 4	8 50	2 26	4 17
15	Assumption	4 43	7 17	13 56	1 s 28	9 8	3 17	4 6
16	Du. of York b.	4 45	7 15	13 37	7 47	9 24	4 8	3 54
17		4 47	7 13	13 18	13 32	9 43	4 58	3 41
18		4 49	7 11	12 58	18 28	10 6	5 50	3 28
19	☉ S. a. Tri.	4 50	7 10	12 39	22 20	10 35	6 43	3 15
20		4 52	7 8	12 19	24 57	11 13	7 37	3 1
21	D. of Claren. b.	4 54	7 6	11 59	26 12	morn	8 32	2 46
22		4 56	7 4	11 39	26 6	0 22	9 25	2 32
23		4 58	7 2	11 18	24 42	1 2	10 16	2 16
24	St. Bartholomew	5 0	7 0	10 58	22 10	2 9	11 4	2 0
25		5 2	6 58	10 37	18 41	3 21	11 50	1 44
26	☉ S. a. Tri.	5 3	6 57	10 16	14 23	☉ rises	morn	1 27
27		5 5	6 55	9 55	9 44	7 a 48	0 33	1 10
28	Augustine	5 7	6 53	9 34	4 40	8 2	1 14	0 57
29	John Bap. beh.	5 9	6 51	9 13	0 n 35	8 15	1 55	0 35
30		5 11	6 49	8 51	5 47	8 27	2 35	0 17
31		5 12	6 47	8 29	10 54	8 41	3 15	0 a. 1
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	H
D	decreas.	of day	long. ♀	long. ♂	long. ♂	long. ☉	long. ♀	long. ♂
1	1	14 15	20 12	8 31	20 35	19 23	9 22	6 8
7	1	32 15	2 12	35 16	48 23	11 15	7 15	40 18
13	1	54 14	40 13	8 17	1 27	0 20	52 25	17 7
19	2	14 14	20 13	40 17	15 0	48 26	30 4	15 6
25	2	38 13	56 14	13 7	28 4	27 2	26 14	26 14

1798.

August.

23

M	Day-lig D begins	Day-lig ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	1 23	10 30	2 56	0 11 39	0 s 13	1 s 5	6 s 1	1 s 16	1 n 35
7	1 46	10 13	2 43	0 19	0 12	1 5	6 16	0 57	1 5
13	2 7	9 52	2 32	0 1	0 12	1 6	6 27	0 38	0 22
19	2 27	9 32	2 23	29 8 41	0 11	1 7	6 33	0 19	0 s 28
25	2 46	9 13	2 15	29 22	0 11	1 8	6 32	0 0	1 22

M	☉'s D longitude	D's long.	D's latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	♏ 9 21 39	19 31	4 s 22	18 50	23 8 26	14 3	2 56 47	♏ 48
2	10 19 5	13 23	3 45	18 58	23 34	14 2	3 57 23	38
3	11 16 33	25 19	2 59	19 5	23 41	14 0	5 7 25	26
4	12 14 2	7 8 24	2 3	19 13	23 49	13 58	6 17 27	13
G	13 11 33	19 44	1 1	19 20	23 56	13 55	7 27 28	58
6	14 9 5	2 11 23	0 n 6	19 28	24 4	13 52	8 38	0 m 42
7	15 6 39	15 26	1 15	19 35	24 11	13 48	9 49	2 24
8	16 4 14	28 56	2 21	19 42	24 18	13 43	10 59	4 5
9	17 1 50	12 56	3 22	19 50	24 25	13 37	12 16	8 44
10	17 59 28	27 23	4 11	19 57	24 31	13 30	13 21	7 22
11	18 57 7	12 13	4 45	20 4	24 38	13 22	14 32	8 58
G	29 54 47	27 19	5 0	20 11	24 44	13 13	15 43	10 32
13	20 52 28	12 m 29	4 54	20 18	24 50	13 4	16 54	12 5
14	21 50 11	27 33	4 28	20 25	24 56	12 54	8 5	13 36
15	22 47 55	12 22	3 41	20 32	25 2	12 43	19 16	15 6
16	23 45 40	26 51	2 46	20 39	25 7	12 34	20 27	16 35
17	24 43 25	10 m 55	1 40	20 46	25 13	12 20	21 39	18 2
18	25 41 12	24 35	0 29	20 53	25 18	12 8	22 50	19 27
G	26 39 0	7 4 53	0 s 41	21 0	25 23	11 56	24 22	20 51
20	27 36 49	20 52	1 47	21 7	25 28	11 43	25 13	22 13
21	28 34 39	3 34	2 47	21 14	25 32	11 29	26 25	23 33
22	29 32 31	16 3	3 37	21 20	25 37	11 14	27 37	24 52
23	30 30 23	28 21	4 16	21 27	25 41	10 59	28 49	26 9
24	1 28 17	10 31	4 43	21 34	25 45	10 44	0 127	24
25	2 26 13	22 35	4 57	21 40	25 49	10 29	1 13	28 38
G	3 24 9	4 33	4 58	21 46	25 53	10 13	2 25	29 50
27	4 22 7	16 28	4 46	21 53	25 56	9 58	3 37	1 0
28	5 20 7	28 19	4 21	21 59	26 0	9 42	4 49	2 7
29	6 18 9	10 10	3 45	22 6	26 3	9 26	6 1	3 12
30	7 16 11	22 2	2 59	22 12	26 6	9 10	7 14	4 15
31	8 14 18	3 58	2 5	22 18	26 9	8 54	8 26	5 16

M	u's D rises	♂'s rises	♀'s rises	♂'s sets	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	10 a 57	9 a 18	1 m 15	8 a 19	21 n 56	17 n 37	11 s 50	2 n 10	15 n 45
7	10 36	8 56	1 22	8 13	21 50	17 47	12 10	22 9	11 38
13	10 15	8 34	1 35	8 2	21 44	17 56	12 37	21 46	7 23
19	9 54	8 10	1 48	7 50	21 39	18 3	13 8	21 1	3 13
25	9 33	7 45	2 2	7 35	21 33	18 9	13 41	19 54	0 s 43

The LUNATIONS.

Last quarter the 3d day, at 25 minutes past 12 noon.

New Moon the 10th day, at 3 minutes past 7 morning.

First quarter the 16th day, at 47 minutes past 12 night.

Full Moon the 25th day, at 4 minutes past 2 morning.

M	Sundays & other D remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉
1	Giuseppe	5 15	6 45	8 n 8	15 n 38	8 a 59	3 m 58	0 20
2	☾ 13 Sun. af. Tri.	5 17	6 43	7 46	19 49	9 23	4 44	0 39
3	[Lond. bu.]	5 19	6 41	7 24	23 12	9 52	5 33	0 58
4		5 21	6 39	7 12	25 31	10 34	6 27	1 18
5		5 23	6 37	6 39	26 27	11 32	7 24	1 37
6		5 24	6 36	6 17	25 46	morn	8 24	1 57
7	Enurhus	5 26	6 34	5 54	23 24	0 46	9 26	2 17
8	Nativ. V. M.	5 28	6 32	5 32	19 25	2 11	10 26	2 37
9	☾ 14 Sun. af. Tri.	5 30	6 30	5 9	14 6	3 43	11 24	2 58
10		5 32	6 28	4 46	7 52	☽ sets	0 a 19	3 18
11		5 34	6 26	4 23	1 9	7 a 19	1 12	3 39
12		5 36	6 24	4 0	5 s 32	7 35	2 4	4 0
13		5 38	6 22	3 37	11 47	7 53	2 57	4 21
14	Holy Crofs	5 40	6 20	3 14	17 13	8 16	3 50	4 41
15		5 42	6 18	2 51	21 34	8 44	4 44	5 2
16	☾ 15 Sun. af. Tri.	5 44	6 16	2 28	24 37	9 20	5 40	5 23
17	Lambert	5 46	6 14	2 5	26 15	10 5	6 35	5 44
18		5 48	6 12	1 41	26 28	11 2	7 29	6 5
19	Ember Week	5 50	6 10	1 18	25 20	morn	8 22	6 26
20		5 52	6 8	0 55	23 2	0 8	9 11	6 47
21	St. Matthew	5 54	6 6	0 31	19 44	1 18	9 57	7 8
22	K. Geo. III. cr.	5 56	6 4	0 8	15 40	2 30	10 41	7 29
23	☾ 16 Sun. af. Tri.	5 58	6 2	0 s 16	11 1	3 42	11 23	7 50
24		6 0	6 0	0 39	5 58	4 52	morn	8 10
25	Old Holyrood	6 2	5 58	1 3	0 42	☾ rises	0 3	8 31
26	St. Cyprian	6 3	5 57	1 26	4 n 36	6 a 44	0 43	8 51
27		6 5	5 55	1 49	9 47	6 57	1 24	9 11
28		6 7	5 53	2 13	14 40	7 13	2 6	9 31
29	St. Mi. Pres. Wi.	6 9	5 51	2 36	19 1	7 34	2 50	9 51
30	☾ 17 Sun. af. Tri.	6 11	5 49	3 0	22 37	8 0	3 38	10 10
31	St. Jer.							
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	H
D	decreaf.	of day	long. ♀	long. ♀	long. ♂	long. ☉	long. ♀	long. ♂
1	3 4	13 30	17 54	14 8 51	9 3	9 12	25 11 54	1 8 0 m 51
7	3 26	13 8	17 57	15 23	12 51	15 2	5 36	18 35 0 32
13	3 50	12 44	18 11	15 56	16 3	20 53	15 19	7 42 0 13
19	4 14	12 20	18 34	16 28	20 26	26 44	25 3	29 33 11 a 52
25	4 38	11 56	18 38	17 0	24 12	2 37	4 48	25 24 11 32

The LUNATIONS.

Last quarter the 2d day, at 31 minutes past 12 night.

New Moon the 9th day, at 37 minutes past 3 afternoon.

First quarter the 16th day, at 17 minutes past 3 afternoon.

Full Moon the 24th day, at 34 minutes past 7 afternoon.

M	Sundays & other	☉	☉	☉'s	☉'s	☉ rises	☉	Clock
D	remark. days	rises	sets	declin.	declin.	& sets	South	aft. ☉
1	Remigius	6 13	5 41	3 s 23	25 n 13	8 a 38	4 m 29	10 29
2		6 15	5 45	3 46	26 33	9 27	5 24	10 47
3		6 17	5 43	4 9	26 24	10 33	6 22	11 6
4		6 19	5 41	4 33	24 40	11 50	7 21	11 24
5		6 21	5 39	4 56	21 22	morn	8 19	11 42
6	Faith	6 23	5 37	5 19	16 40	1 17	9 16	11 59
7	18 Sun. a. Trin.	6 25	5 35	5 42	10 51	2 46	10 11	12 16
8		6 27	5 33	6 5	4 19	4 19	11 5	12 32
9	Denys	6 29	5 31	6 28	2 s 29	☉ sets	11 57	12 48
10	Ox. & Cam. T. b.	6 31	5 29	6 51	9 7	6 a 4	o a 51	13 4
11	[Ola Mic.	6 33	5 27	7 13	15 8	6 24	1 44	13 19
12		6 35	5 25	7 36	20 9	6 48	2 39	13 33
13	Tr. K. Edw. Con.	6 37	5 23	7 58	23 51	7 21	3 36	13 47
14	19 Sun. af. Tri.	6 39	5 21	8 21	26 4	8 4	4 34	14 0
15		6 41	5 19	8 43	26 45	8 58	5 30	14 13
16		6 43	5 17	9 5	25 59	10 2	6 24	14 26
17	Etheldred	6 44	5 16	9 27	23 57	11 14	7 15	14 38
18	St. Luke	6 46	5 14	9 49	20 52	morn	8 3	14 49
19		6 48	5 12	10 11	16 57	0 27	8 47	15 0
20		6 50	5 10	10 32	12 25	1 38	9 29	15 10
21	20 Sun. af. Tri.	6 52	5 8	10 54	7 26	2 48	10 9	15 19
22		6 54	5 6	11 15	2 11	3 56	10 49	15 28
23		6 56	5 4	11 36	3 n 11	5 6	11 29	15 36
24		6 58	5 2	11 57	8 28	☉ rises	morn	15 43
25	K. Geo. 3. acc.	Crispin	5 0	12 18	13 31	5 a 26	0 11	15 50
26	K. Geo. 3. proc.	7 2	4 59	12 38	18 5	5 45	0 55	15 56
27		7 3	4 58	12 59	21 57	6 9	1 42	16 1
28	21 S. a. Tr. St.	7 5	4 57	13 19	24 50	6 41	2 32	16 5
29	[Sim. & Jude	7 7	4 55	13 39	26 30	7 27	3 25	16 9
30		7 9	4 54	13 58	26 44	8 26	4 21	16 12
31		7 11	4 49	14 18	25 26	9 39	5 18	16 14
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	decreas.	of day	long. ♀	long. ♀	long. ♂	long. ☉	long. ♀	rises
1	5 0	11 34	18 53	17 8	33 27	31 8	33 14	21 11
7	5 24	11 10	19 5	18 5	34 14	26 14	18 2	11 53
13	5 48	10 46	19 18	18 38	5 24	20 23	4 3	10 32
19	6 10	10 24	17 31	19 10	9 5	26 21	13 48	10 11
25	6 36	9 58	13 45	19 42	12 46	28 20	23 32	9 50

1798.

October.

27

M	Daylig. D begins	Daylig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	4 18	7 42	1 56	27 8 25	0 8	1 13	4 24	1 22	1 6
2	4 31	7 29	1 55	27 6	0 7	1 13	3 55	1 28	0 44
3	4 43	7 17	1 54	26 47	0 7	1 14	3 28	1 31	1 47
4	4 53	7 5	1 54	26 28	0 6	1 14	3 1	1 31	2 3
5	5 4	6 56	1 55	26 8	0 6	1 14	2 36	1 29	1 48
M	☉'s longitude	D's long.	D's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.	
1	8 31 0	20 11 11	2 0 7	24 57	26 8 2	3 50	16 20	0 17	
2	9 30 7	3 26 7	3 7 25	1 25 58	3 51	17 34	2 32		
3	10 29 17	16 26	3 59 25	4 25 55	3 53	18 48	28 57		
4	11 28 30	0 11 11	4 39 25	8 25 51	3 56	20 2	28 33		
5	12 27 45	14 22	5 31 25	11 25 47	4 0	21 16	23 17		
6	13 27 2	28 59	5 9 25	15 25 43	4 4	22 30	28 13		
7	14 26 22	13 55	4 54 25	18 25 39	4 9	23 45	28 20		
8	15 25 44	29 5	4 19 25	22 25 35	4 15	24 59	28 37		
9	16 25 8	14 17	3 25 25	25 25 30	4 22	26 14	29 4		
10	17 24 34	29 22	2 17 25	28 25 25	4 29	27 28	29 41		
11	18 24 3	14 10	1 12 25	31 25 20	4 37	28 43	30 7		
12	19 23 33	28 35	0 8 17	25 34 25	4 45	29 57	1 21		
13	20 23 5	12 32	1 32 25	37 25 9	4 54	1 12	2 21		
14	21 22 39	26 2	2 40 25	39 25 4	5 4	2 26	3 27		
15	22 22 14	9 6	3 36 25	42 24 58	5 15	3 41	4 40		
16	23 21 52	21 48	4 21 25	44 24 53	5 27	4 56	5 50		
17	24 21 30	4 11	4 52 25	47 24 47	5 40	6 11	7 22		
18	25 21 11	16 20	5 9 25	49 24 41	5 54	7 26	8 8		
19	26 20 53	28 19	5 12 25	51 24 35	6 8	8 41	10 16		
20	27 20 38	10 13	5 2 25	53 24 29	6 22	9 56	11 47		
21	28 20 23	22 4	4 40 25	55 24 22	6 37	11 11	13 20		
22	29 20 11	3 56	4 5 25	56 24 15	6 52	12 26	14 55		
23	0 20 0	15 50	3 19 25	58 24 8	7 8	13 41	16 31		
24	1 19 52	27 50	2 24 26	0 24 1	7 25	14 56	18 8		
25	2 19 45	9 57	1 22 26	1 23 54	7 42	16 11	19 47		
26	3 19 40	22 11	0 15 26	3 23 47	8 0	17 26	21 25		
27	4 19 37	4 36	0 53 26	4 23 39	8 19	18 41	23 4		
28	5 19 37	17 11	2 0 26	5 23 32	8 38	19 56	24 43		
29	6 19 39	0 0	3 2 26	6 23 24	8 57	21 11	26 22		
30	7 19 42	13 5	3 56 26	7 23 17	9 16	22 26	28 2		
31	8 19 48	26 26	4 38 26	8 23 9	9 36	23 41	29 42		
M	☉ rises	♂ sets	♀ rises	♂ rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	8 a 21	2 m 51	4 m 3	5 m 27	21 n 2	18 n 7	14 s 13	6 n 40	1 s 8
7	7 58	2 31	4 23	4 51	20 50	18 1	13 39	3 49	1 n 21
13	7 35	2 16	4 43	4 50	20 56	17 53	12 56	0 54	0 42
19	7 11	2 2	5 3	5 12	20 54	17 45	12 4	2 3	2 s 11
25	6 46	2 49	5 22	5 44	20 53	17 34	11 7	5 0	6 5

The LUNATIONS.

Last quarter the 1st day, at 32 minutes past 10 morning.

New Moon the 8th day, at 52 minutes past 1 morning.

First quarter the 15th day, at 22 minutes past 9 morning.

Full Moon the 23d day, at 45 minutes past 12 noon.

Last quarter the 30th day, at 55 minutes past 6 afternoon.

M	Sundays & other	☉	☉	☉'s	☾'s	☾ rises	☾	Clock
D	remark. days	rises	sets	declin.	declin.	& sets	South	aft. ☉
1	All Saints	7 13	4 47	14 s 37	22 n 32	11 a 8	6 m 15	16 15
2	Pr. Edward born	All Sou	4 46	14 56	18 28	morn	7 11	16 15
3	s. Sophia b.	7 16	4 44	15 15	13 10	0 26	8 4	16 15
4	23 S. A. T. King	7 18	4 42	15 33	7 3	1 53	8 56	16 14
5	P. Plot W. lan.	7 20	4 40	15 52	0 28	3 20	9 47	16 12
6	Leonard 1er. d.	7 21	4 39	16 10	6 s 11	4 49	10 38	16 9
7		7 23	4 37	16 28	12 30	6 17	11 30	16 5
8	Pr. Au. Sop. b.	7 25	4 35	16 45	18 3	☾ sets	0 a 24	16 0
9	Lord Mayor's d.	7 26	4 34	17 2	22 27	5 a 13	1 21	15 55
10		7 28	4 32	17 19	25 24	5 54	2 19	15 48
11	23 Sun. a. Trin.	7 30	4 30	17 36	26 45	6 45	3 18	15 41
12	[St. Martin	7 32	4 28	17 52	26 31	7 47	4 15	15 33
13	Britius	7 33	4 27	18 8	24 52	8 57	5 8	15 24
14		7 35	4 25	18 24	22 2	10 10	5 57	15 15
15	Machutus	7 36	4 24	18 30	18 18	11 23	6 43	15 4
16		7 38	4 22	18 54	13 54	morn	7 26	14 53
17	Hugh	7 39	4 21	19 9	9 0	0 34	8 6	14 40
18	24 Sun. af. Tri.	7 41	4 19	19 23	3 49	1 42	8 46	14 26
19		7 42	4 18	19 37	1 n 32	2 52	9 25	14 14
20	Edmund	7 44	4 16	19 51	6 51	4 0	10 6	13 59
21		7 45	4 15	20 4	12 3	5 10	10 49	13 44
22	Cecilia. O. Mart.	7 46	4 14	20 17	16 50	6 24	11 34	13 28
23	Clement	7 48	4 12	20 29	20 58	Drises	morn	13 11
24	[of Glo. b.	7 49	4 11	20 41	24 12	4 a 38	0 23	12 53
25	25 S. A. Tr. Duke	Cather.	4 10	20 53	26 12	5 10	1 16	12 35
26		7 52	4 8	21 4	26 49	6 15	2 12	12 15
27		7 53	4 7	21 15	25 52	7 25	3 10	11 57
28	Mic. Term ends	7 54	4 6	21 26	23 23	8 42	4 7	11 35
29		7 55	4 5	21 36	19 32	10 5	5 2	11 14
30	St. Andrew	7 56	4 4	21 46	14 35	11 30	5 55	10 51
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	decreaf.	of day	long. ♀	long. ♂	long. ♀	long. ♂	long. ♀	rises
1	7 0	9 34	20 0	20 8 2	17 0	9 8 20	4 53	11 35
7	7 20	9 14	20 14	20 52	30 37	15 22	14 34	11 37
13	7 40	8 54	20 27	21 25	14 11	21 24	14 19	32
19	7 58	8 36	20 41	21 57	27 44	27 28	3 m 53	6 f 20
25	8 14	8 20	20 54	22 26	18 15	31 32	13 30	23 50

1798.

November.

29

M.	Daylig. D. begins	Daylig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	5 17	6 43	1 56	25 8 46	0 s 5	1 s 14	2 s 10	1 n 24	1 n 11
7	5 26	6 34	1 58	25 27	0 s 5	1 s 13	1 49	1 17	0 32
13	5 33	6 28	2 00	25 8	0 s 4	1 s 13	1 31	1 8	0 s 8
19	5 41	6 19	2 24	49	0 4	1 12	1 13	0 58	0 47
25	5 47	6 13	2 42	30	0 3	1 11	0 58	0 45	1 22

M.	☉'s D. longitude	D's long.	D's latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	m 9 19 57	10 7	5 n 6	26 26	9 23 8 2	9 57	24 50	1 m 21
2	10 20 7	24 7	5 16	26 9 22	54	10 18	26 11	3 0
3	11 20 20	8 m 26	5 8	26 9 22	46	10 40	27 26	4 39
G	12 20 35	23 1	4 40	26 10 22	38	11 22	41 6	17
5	13 20 52	7 47	3 51	26 10 22	30	11 25	29 56	7 55
6	14 21 10	22 39	2 50	26 10 22	21	11 48	1 m 11	9 33
7	15 21 31	7 m 27	1 36	26 R 10 22	14	12 12	2 27	11 13
8	16 21 54	22 6	0 16	26 10 21	6	12 36	3 42	12 48
9	17 22 19	6 27	1 s 3	26 10 21	58	13 0	4 57	14 25
10	18 22 44	20 27	2 17	26 10 21	50	13 25	6 12	16 1
G	19 23 12	4 v 2	3 20	26 9 21	42	13 50	7 28	17 37
12	20 23 41	17 12	4 11	26 9 21	34	14 16	8 43	19 13
13	21 24 11	30 0	4 48	26 9 21	25	14 42	9 59	20 49
14	22 24 43	12 27	5 10	26 8 21	17	15 8	11 14	22 24
15	23 25 16	24 38	5 18	26 7 21	9	15 35	12 30	23 59
16	24 25 50	6 38	5 11	26 6 21	1	16 2	13 45	25 34
17	25 26 25	18 32	4 51	26 5 20	53	16 30	15 12	27 9
G	26 27 2	0 v 23	4 19	26 3 20	45	16 58	16 28	28 44
19	27 27 39	12 15	3 36	26 1 20	36	17 26	17 32	0 18
20	28 28 18	24 14	2 43	26 0 20	28	17 54	18 47	1 52
21	29 28 58	6 21	1 42	25 58 20	20	18 22	20 3	3 26
22	30 29 40	18 38	0 35	25 57 20	12	18 50	21 18	5 0
23	1 30 22	1 9	0 n 34	25 55 20	4	19 19	22 34	6 34
24	2 31 6	13 53	1 43	25 53 19	56	19 48	23 49	8 7
G	3 31 52	26 50	2 48	25 51 19	48	20 18	25 5	9 40
26	4 32 39	10 25	3 44	25 49 19	41	20 48	26 20	11 14
27	5 33 27	23 26	4 30	25 47 19	33	21 18	27 35	12 47
28	6 34 17	7 2	5 12	25 44 19	26	21 49	28 51	14 20
29	7 35 8	20 51	5 16	25 42 19	18	22 19	0 6	15 54
30	8 36 1	4 m 50	6 12	25 40 19	11	22 49	1 21	17 27

M.	u's D. rises	♂'s sets	♀'s rises	♂'s sets	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	5 a 17	1 m 37	5 m 45	6 m 24	20 n 52	17 n 22	9 s 52	8 s 22	10 s 51
7	4 52	1 27	6 5	7 0	20 52	17 10	8 42	11 8	14 42
13	sets	1 18	6 24	sets	20 53	16 58	7 26	13 45	18 7
19	7 m 9	1 10	6 42	4 a 20	20 55	16 46	6 6	10 21	1
25	6 39	1 2	6 40	4 18	20 57	16 34	4 44	18 20	23 17

1798.

December.

31

M	Day lig.	Day lig.	Durat.	Pl. D's	h's	u's	♂'s	♀'s	♂'s
D	begins	ends	twilig.	node	latitude	latitude	latitude	latitude	latitude
1	5 54	6 6	2 5	24 8 11	0 s 2	1 s 10	0 s 44	0 n 32	1 s 51
7	5 57	6 3	2 6	23 52	0 2	1 9	0 31	0 18	2 10
13	5 59	6 1	2 7	23 33	0 1	1 7	0 19	0 4	2 16
19	6 1	5 59	2 7	23 14	0 0	1 6	0 9	0 s 10	2 3
25	6 1	5 59	2 7	22 55	0 c	1 4	0 c	0 24	1 23
M	♂'s		D's	D's	h's	u's	♂'s	♀'s	♂'s
D	longitude		long.	latitude	long.	long.	long.	long.	long.
1	♂ 9 36	56	18 12 58	4 n 49	25 26 37	19 8 4	23 12 20	2 ♀ 37	19 ♀ 1
G	10 37	52	3 14	4 9	25 35	18 57	23 51	3 52	20 34
3	11 38	49	17 35	3 12	25 32	18 50	24 23	5 8	22 7
4	12 39	47	1 m 58	2 4	25 29	18 43	24 55	6 23	23 39
5	13 40	47	16 18	0 48	25 26	18 36	25 27	7 39	25 12
6	14 41	48	0 ♀ 33	0 s 31	25 23	18 30	25 59	8 55	26 45
7	15 42	50	14 36	1 46	25 20	18 23	26 31	10 11	28 17
8	16 43	53	28 24	2 54	25 17	18 17	27 3	11 26	29 49
G	17 44	57	1 m 54	3 50	25 14	18 11	27 36	12 42	1 v 21
10	18 46	2	25 3	4 33	25 10	18 5	28 9	13 57	2 53
11	19 47	6	7 m 52	5 1	25 7	17 59	28 42	15 13	4 24
12	20 48	12	20 22	5 13	25 3	17 53	29 15	16 28	5 55
13	21 49	18	2 36	5 11	24 59	17 47	29 48	17 44	7 26
14	22 50	24	14 37	4 55	24 56	17 42	0 v 21	18 59	8 56
15	23 51	31	26 31	4 27	24 52	17 37	0 55	20 15	10 26
G	24 52	38	8 v 21	3 47	24 48	17 32	1 29	21 50	11 55
17	25 53	45	20 14	2 58	24 44	17 27	2 3	22 46	13 23
18	26 54	52	2 8 14	2 c	24 40	17 22	2 37	24 1	14 48
19	27 55	59	14 25	0 56	24 36	17 18	3 11	25 17	16 11
20	28 57	6	26 51	0 n 12	24 32	17 14	3 45	26 32	17 32
21	29 58	14	9 11 35	1 20	24 28	17 10	4 20	27 48	18 52
22	30 59	22	22 37	2 26	24 24	17 6	4 54	29 3	20 10
G	2 0	31	6 25 0	3 26	24 19	17 2	5 29	0 v 19	21 25
24	3 1	39	19 39	4 15	24 15	16 58	6 4	1 34	22 35
25	4 2	48	3 32	4 50	24 10	16 55	6 39	2 50	23 41
26	5 3	58	17 35	5 7	24 6	16 5	7 14	4 6	24 42
27	6 5	8	1 m 44	5 7	24 1	16 4	7 49	5 21	25 37
28	7 6	18	15 56	4 47	23 57	16 4	8 24	6 37	26 27
29	8 7	29	0 7	4 11	23 52	16 43	9 c	7 52	27 9
G	9 8	40	14 15	3 19	23 47	16 40	9 35	9 8	27 42
31	10 9	51	28 20	2 15	23 42	16 38	10 10	10 23	28 6
M	u's	♂'s	♀'s	♂'s	h's	u's	♂'s	♀'s	♂'s
D	fets	fe's	rises	fets	declin.	declin.	declin.	declin.	declin.
1	6 m 10	0 m 54	7 m 17	4 a 21	21 n 0	16 n 23	3 s 19	20 s 11	21 s 51
7	5 40	0 45	7 32	4 30	21 4	16 13	1 52	21 42	25 37
13	5 10	0 38	7 45	4 45	21 9	16 5	0 22	22 50	25 32
19	4 41	0 31	7 57	5 42	21 14	15 58	1 n 8	23 34	24 32
25	4 13	0 26	8 6	5 23	21 19	15 53	2 39	23 51	22 45

32 The Georgian or New Planet. White.

Dates		Heliocentric		Geocentric		Declin.	South.
Months	Days	longitude	latitude	longitude	latitude		
January	I	14 14 54	0 0 46	17 14 44	0 0 47	5 34	16 23
	11	15 2	0 0 46	17 36	0 0 48	5 38	15 39
	21	15 10	0 0 46	17 23	0 0 48	5 44	14 56
February	I	15 18	0 0 46	17 3	0 0 48	5 52	14 9
	11	15 26	0 0 46	16 41	0 0 49	6 1	13 28
	21	15 34	0 0 46	16 17	0 0 49	6 10	12 48
March	I	15 4	0 0 46	15 56	0 0 49	6 19	12 16
	11	15 48	0 0 46	15 29	0 0 49	6 29	11 37
	21	15 56	0 0 46	15 4	0 0 49	6 38	10 59
April	I	16 5	0 0 46	14 38	0 0 49	6 48	10 18
	11	16 12	0 0 46	14 16	0 0 48	6 56	9 40
	21	16 20	0 0 46	14 0	0 0 48	7 2	9 3
May	I	16 28	0 0 46	13 47	0 0 48	7 7	8 25
	11	16 36	0 0 46	13 40	0 0 47	7 10	7 46
	21	16 44	0 0 46	13 D 37	0 0 47	7 10	7 6
June	I	16 52	0 0 46	13 41	0 0 46	7 8	6 22
	11	17 0	0 0 46	13 49	0 0 46	7 5	5 41
	21	17 8	0 0 46	14 3	0 0 45	6 58	5 1
July	I	17 16	0 0 46	14 22	0 0 45	6 51	4 20
	11	17 24	0 0 46	14 45	0 0 45	6 42	3 40
	21	17 32	0 0 46	15 12	0 0 44	6 31	3 2
August	I	17 40	0 0 46	15 46	0 0 44	6 18	2 21
	11	17 48	0 0 46	16 20	0 0 44	6 4	1 45
	21	17 56	0 0 46	16 54	0 0 44	5 50	1 10
September	I	18 4	0 0 46	17 37	0 0 44	5 34	0 32
	11	18 12	0 0 46	18 15	0 0 44	5 20	23 55
	21	18 20	0 0 46	18 52	0 0 44	5 5	23 21
October	I	18 28	0 0 46	19 30	0 0 44	4 50	22 48
	11	18 36	0 0 46	20 5	0 0 44	4 36	22 14
	21	18 44	0 0 46	20 30	0 0 44	4 23	21 38
November	I	18 52	0 0 46	21 12	0 0 44	4 10	20 58
	11	19 0	0 0 46	21 38	0 0 45	4 0	20 19
	21	19 8	0 0 46	22 0	0 0 45	3 52	19 29
December	I	19 16	0 0 46	22 18	0 0 45	3 46	18 58
	11	19 24	0 0 46	22 30	0 0 46	3 41	18 15
	21	19 31	0 0 46	22 36	0 0 46	3 39	17 31

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	JANUARY				FEBRUARY				MARCH				APRIL				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	0	35	1	8	2	21	2	45	1	0	1	31	2	34	2	53	1
2	1	42	2	13	3	7	3	27	2	1	2	28	3	11	3	28	2
3	2	43	3	6	3	45	4	3	2	52	3	12	3	45	4	2	3
4	3	26	3	44	4	20	4	40	3	28	3	44	4	19	4	40	4
5	4	3	4	23	4	59	5	19	4	0	4	18	5	1	5	23	5
6	4	46	5	7	5	38	6	2	4	36	4	54	5	46	6	13	6
7	5	27	5	50	6	27	6	52	5	15	5	39	6	42	7	11	7
8	6	14	6	35	7	15	7	49	6	2	6	29	7	40	8	12	8
9	7	5	7	32	8	21	8	54	6	56	7	26	8	44	9	16	9
10	8	1	8	31	9	28	10	2	7	58	8	32	9	49	10	19	10
11	9	1	9	33	10	37	11	10	9	7	9	41	10	48	11	17	11
12	10	5	10	37	11	42	0	12	10	15	10	47	11	44			12
13	11	9	11	41			0	40	11	18	11	48	0	8	0	32	13
14			0	13	1	6	1	31			0	15	0	54	1	16	14
15	0	42	1	8	1	55	2	18	0	40	1	3	1	36	1	57	15
16	1	35	2	1	2	36	2	54	1	25	1	47	2	17	2	37	16
17	2	24	2	47	3	9	3	23	2	8	2	29	2	53	3	9	17
18	3	4	3	20	3	36	3	48	2	45	3	0	3	25	3	41	18
19	3	34	3	48	4	1	4	14	3	14	3	28	3	56	4	12	19
20	4	2	4	15	4	30	4	46	3	41	3	54	4	33	4	55	20
21	4	31	4	47	5	3	5	19	4	9	4	24	5	17	5	42	21
22	5	3	5	18	5	40	6	1	4	42	5	2	6	12	6	42	22
23	5	35	5	54	6	26	6	53	5	23	5	44	7	14	7	47	23
24	6	14	6	37	7	24	7	56	6	12	6	42	8	23	9	2	24
25	7	0	7	25	7	32	9	11	7	14	7	47	9	39	10	16	25
26	7	53	8	24	8	51	10	31	8	26	9	7	10	50	11	23	26
27	8	59	9	35	10	12	11	52	9	47	10	27	11	54			27
28	10	12	10	50			0	27	11	6	11	42	0	24	0	52	28
29	11	29									0	15	1	18	1	44	29
30	0	8	0	44					0	46	1	14	2	10	2	33	30
31	1	17	1	52					1	41	2	8					31

This Table may serve the following Places, by adding

	h	m
For Tinmouth Haven, Hartle-pool, and Amsterdam	0	30
Brest — — — — —	1	0
Scilly — — — — —	1	45
Mount's Bay — — — — —	1	55
Bridlington Pier and Humber — — — — —	2	0

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

M. Days	MAY				JUNE				JULY				AUGUST				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	2	55	3	13	3	51	4	10	4	3	4	21	4	39	4	54	1
2	3	31	3	48	4	28	4	47	4	39	4	55	5	9	5	26	2
3	4	5	4	25	5	7	5	27	5	11	5	29	5	43	6	3	3
4	4	46	5	8	5	49	6	11	5	47	6	7	6	25	6	48	4
5	5	29	5	54	6	35	6	57	6	28	6	50	7	12	7	40	5
6	6	21	6	47	7	20	7	45	7	11	7	34	8	9	8	42	6
7	7	14	7	42	8	10	8	36	7	58	8	25	9	16	9	53	7
8	8	10	8	38	9	2	9	30	8	53	9	24	10	31	10	10	8
9	9	8	9	36	9	57	10	24	9	57	10	28	11	50			9
10	10	5	10	32	10	50	11	19	11	0	11	35	0	25	0	59	10
11	10	56	11	22	11	48				0	10		1	31	2	3	11
12	11	48			0	16	0	44	0	42	1	15	2	30	2	55	12
13	0	13	0	36	1	12	1	39	1	47	2	18	3	14	3	32	13
14	0	59	1	22	2	7	2	36	2	43	3	7	3	49	4	5	14
15	1	42	1	59	2	58	3	19	3	27	3	46	4	24	4	43	15
16	2	21	2	43	3	38	3	57	4	4	4	22	5	2	5	22	16
17	3	6	3	30	4	19	4	40	4	42	5	3	5	45	6	9	17
18	3	48	4	5	5	2	5	23	5	23	5	44	6	36	7	4	18
19	4	27	4	50	5	48	6	13	6	8	6	33	7	35	8	6	19
20	5	13	5	37	6	40	7	7	6	59	7	26	8	41	9	18	20
21	6	5	6	35	7	35	8	4	7	57	8	29	9	55	10	31	21
22	7	5	7	35	8	35	9	7	9	2	9	36	11	5	11	38	22
23	8	7	8	40	9	38	10	10	10	12	10	48		0	0	8	23
24	9	14	9	48	10	42	11	15	11	21	11	54	0	37	1	3	24
25	10	19	10	50	11	47					0	26	1	28	1	52	25
26	11	22	11	54	0	19	0	49	0	55	1	23	2	15	2	34	26
27			0	23	1	17	1	45	1	49	2	14	2	52	3	6	27
28	0	50	1	17	2	13	2	36	2	39	2	56	3	20	3	33	28
29	1	43	2	10	2	58	3	16	3	12	3	28	3	46	3	58	29
30	2	36	2	57	3	32	3	48	3	42	3	55	4	10	4	25	30
31	3	16	3	34					4	7	4	23	4	42	4	58	31

Adding

					h	m
For Fowey, Loo and Plymouth	—	—	—	—	3	10
Dartmouth, Harborough and Hull	—	—	—	—	3	30
Torbay and Tinmouth	—	—	—	—	3	40
Exmouth, Topsham and Lyme	—	—	—	—	3	50
Bristol and Weymouth	—	—	—	—	4	20
Bridgewater and Texel	—	—	—	—	4	40
Portland and Hartflw	—	—	—	—	5	50

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	5	14	5	34	5	41	6	8	7	32	8	6	8	9	8	41	1
2	5	55	6	20	6	36	7	8	8	42	9	18	9	14	9	46	2
3	6	46	7	16	7	41	8	17	9	55	10	28	10	18	10	49	3
4	7	47	8	23	8	55	9	34	11	0	11	33	11	20	11	51	4
5	9	0	9	40	10	14	10	51			0	6			0	23	5
6	10	20	11	0	11	27	11	59	0	34	1	1	0	53	1	21	6
7	11	39					0	32	1	28	1	54	1	50	2	19	7
8	0	14	0	48	1	1	1	29	2	20	2	45	2	43	3	6	8
9	1	18	1	48	1	56	2	22	3	6	3	25	3	26	3	44	9
10	2	15	2	41	2	44	3	5	3	45	4	6	4	0	4	19	10
11	3	0	3	19	3	23	3	39	4	26	4	44	4	39	4	59	11
12	3	35	3	51	3	56	4	13	5	6	5	28	5	19	5	38	12
13	4	9	4	28	4	35	4	58	5	53	6	19	6	0	6	22	13
14	4	48	5	8	5	22	5	45	6	47	7	12	6	44	7	7	14
15	5	31	5	55	6	14	6	43	7	39	8	6	7	29	7	51	15
16	6	24	6	53	7	13	7	43	8	34	9	2	8	16	8	41	16
17	7	24	7	57	8	15	8	48	9	29	9	57	9	8	9	35	17
18	8	32	9	7	9	20	9	53	10	23	10	48	10	3	10	31	18
19	9	42	10	18	10	22	10	50	11	13	11	38	10	59	11	27	19
20	10	50	11	20	11	18	11	46			0	2	11	55			20
21	11	49					0	9	0	26	0	50	0	23	0	51	21
22	0	17	0	41	0	30	0	52	1	13	1	36	1	19	1	47	22
23	1	4	1	26	1	13	1	33	1	59	2	21	2	15	2	39	23
24	1	47	2	7	1	53	2	14	2	44	3	3	3	2	3	22	24
25	2	28	2	44	2	35	2	51	3	22	3	39	3	41	3	59	25
26	2	59	3	13	3	7	3	23	3	56	4	16	4	16	4	39	26
27	3	26	3	44	3	38	3	53	4	38	5	0	4	59	5	20	27
28	3	53	4	7	4	8	4	28	5	22	5	47	5	41	6	5	28
29	4	22	4	40	4	49	5	11	6	13	6	41	6	30	6	55	29
30	4	59	5	20	5	34	6	2	7	10	7	40	7	21	7	51	30
31					6	30	7	1					8	22	8	56	31

Subtracting

h m

For Leigh, Maes, and Gouries Gut	—	—	—	—	0	5
Graysend, Rochester, and Rammekins	—	—	—	—	1	20
Buoy of the Nore and Flushing	—	—	—	—	1	30
Portsmouth, Ostend, Shoe-Beacon, and Red-Sand	—	—	—	—	2	0
Harwich, Dover, Spithead, and Calais	—	—	—	—	3	0
Gunfleet, Hastings, Shoreham, Orfordness, and Dieppe	—	—	—	—	4	0
Yarmouth Pier and Needle	—	—	—	—	4	40
St. Helen's and Havre-de-Grace	—	—	—	—	5	30

The Eclipses of Jupiter's

JANUARY	FEBRUARY	MARCH	APRIL
Emerfions	Emerfions	Emerfions	The eclipses of Jupiter's Satellites are not vifible this Month, Jupiter being too near the Sun.
d h m s	d h m s	d h m s	
2 12 29 33	1 14 33 20	1 22 18 36	
4* 6 57 45	3* 9 2 9	3 16 47 52	
6 1 25 58	5 3 31 0	5 11 17 17	
7 19 54 13	6 21 59 53	7 5 46 38	
9 14 22 29	8 16 28 48	9 0 16 0	
11* 8 50 51	10 10 57 47	10 18 45 18	
13 3 19 8	12 5 26 46	12 13 14 47	
14 21 47 33	13 23 55 49	14 7 44 10	
16 16 15 57	15 18 24 52	16 2 13 36	
18 10 44 24	17 12 54 2	17 20 43 0	
20* 5 12 50	19* 7 23 7	19 15 12 26	
21 23 41 22	21 1 52 21	21 9 41 49	
23 18 9 53	22 20 21 29		
25 12 38 30	24 14 50 47		
27* 7 7 9	26 9 19 59		
29 1 35 51	28 3 49 16		
30 20 4 34			
MAY	JUNE	JULY	AUGUST
Immerfions	Immerfions	Immerfions	Immerfions
24 0 59 52	1 21 21 54	1 23 21 11	1 1 22 39
25 19 28 21	3 15 50 12	3 17 49 21	2 19 51 10
27 13 56 47	5 10 18 28	5 12 17 32	4* 14 19 45
29 8 25 12	7 4 46 44	7 6 45 42	6 8 48 21
31 2 53 33	8 23 14 58	9 1 13 57	8 3 17 0
	10 17 43 12	10 19 42 8	9 21 45 36
	12 12 11 23	12* 14 10 20	11 16 14 17
	14 6 39 34	14 8 38 38	13 10 43 1
	16 1 7 45	16 3 6 54	15 5 11 41
	17 19 35 56	17 21 35 13	16 23 40 30
	19 14 4 6	19 16 3 32	18 18 9 17
	21 8 32 15	21 10 31 55	20* 12 38 7
	23 3 0 22	23 5 0 15	22 7 6 57
	24 21 28 31	24 23 28 42	24 1 35 51
	26 15 56 42	26 17 57 6	25 20 4 41
	28 10 24 53	28* 12 25 37	27* 14 33 38
	30 4 53 0	30 6 54 5	29 9 2 32
			31 3 31 29

first Satellite for the Year 1798.

SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Immersion	Immersion	Immersion	Emerfions
d h m s	d h m s	d h m s	d h m s
1 22 0 22	2 0 13 32	1 2 23 16	1* 6 31 54
3* 16 29 21	3 18 42 29	2 20 51 47	3 0 59 54
5* 10 58 20	5* 13 11 29	4* 15 20 20	4 19 27 55
7 5 27 18	7* 7 40 24	6* 9 48 48	6* 13 55 55
8 23 56 22	9 2 9 21	8 4 17 19	8* 8 23 53
10 18 25 20	10 20 38 14	9 22 45 42	10 2 51 48
12* 12 54 27	12* 15 7 9	11* 17 14 6	11 21 19 46
14 7 23 22	14* 9 36 0	Emerfions	13* 15 47 39
16 1 52 28	16 4 4 53	13* 13 50 7	15* 10 15 37
17 20 21 29	17 22 33 41	15* 8 18 28	17 4 43 29
19* 14 50 31	19* 17 2 31	17 2 46 45	18 23 11 28
21* 9 19 32	21* 11 31 16	18 21 15 0	20 17 39 23
23 3 48 35	23 6 0 2	20* 15 43 12	22* 12 7 19
24 22 17 35	25 0 28 44	22* 10 11 24	24* 6 35 15
26* 16 46 36	26 18 57 27	24 4 39 32	26 1 3 10
28* 11 15 35	28* 13 26 5	25 23 7 38	27 19 31 12
30 5 44 33	30* 7 54 41	27 17 35 45	29* 13 59 12
		29* 12 3 49	31* 8 27 12

The Times of the Eclipses contained in this Table are adapted to the Meridian of the Royal Observatory at Greenwich, and afford an excellent Method to discover the Longitude, or Difference of Meridians, between that and any other Place; which I shall illustrate by an EXAMPLE:

Suppose on the 30th Day of September of this Year, the Time of the Immersion of Jupiter's first Satellite be observed (by a Telescope) in an unknown Meridian, to happen at 7 h. 32 min. 53 sec.; I find by the Table, that the Time of this Immersion will happen at the British Observatory, at 5 h. 44 min. 33 sec. the same day: The Difference of the Times is 1 hour 48 min. 20 sec. which being converted into Degrees and Minutes of the Equator, will make 27 deg. 5 min. the Longitude of the Place of Observation, to the East, because the Time is more than that at the British Observatory.

N. B. Those marked with an Asterisk are visible at Greenwich.

Speculum Phænomenorum

JANUARY	FEBRUARY	MARCH
1 ♂ ☾ ♀ 22h. 3 ♀ elong. max. 4 ☾ in perige 11 ♂ ☾ ♂ 16h. 11 ♀ elong. max. 12 ♀ in ☾ 13 ♀ in ☾ 18 ♂ ☾ ♀ oh. 18 ♀ stationary 18 ♀ in perihelion 19 ☉ in ☾ 5h. 18m. 19 ☾ in apoge 20 ♂ ☾ ♀ 18h. 23 ♂ ☾ ☾ 4h. 26 ♂ ☉ ♀ 19h. 29 ♂ ☾ ♀ 22h.	1 ☾ in perige 8 ♀ stationary 9 ♂ ☾ ♂ 9h. 13 ♂ ☾ ♀ 1h. 15 ☾ in apoge 16 ♀ in perihelio 17 ☉ in ☾ 20h. 5m. 18 ♂ ☾ ♀ 9h. 18 ♂ ☾ ☾ 15h. 19 ♀ elong. max. 21 ♀ in ☾ 22 ♀ in ☾ 22 ♀ stationary 25 ♂ ☾ ♀ 13h.	2 ☾ in perige 3 ♀ in aphelion 5 ♀ stationary 10 ♂ ☾ ♂ 4h. 15 ♂ ☾ ♀ 8h. 15 ♂ ☉ ♀ 19h. 15 ☾ in apoge 16 ♂ ☾ ♀ 22h. 19 ♂ ☾ ☾ 9h. 19 ☉ in ☾ 20h. 25m. 24 ♂ ☾ ♀ 21h. 25 ☐ ☉ ♀ 7h. 30 ☾ in perige
APRIL	MAY	JUNE
5 ♀ stationary 6 ♂ ☉ ♀ 10h. 8 ♂ ☾ ♂ oh. 11 ☾ in apoge 11 ♀ in ☾ 12 ♂ ☾ ♀ 16h. 13 ♀ in ☾ 16 ♂ ☾ ☾ 4h. 16 ♂ ☾ ♀ 18h. 16 ♀ in perihelion 19 ☉ in ☾ 9h. 2m. 19 ☐ ☉ ♂ 20h. 21 ♂ ☾ ♀ 5h. 22 ♂ ☉ ☾ 8h. 27 ☾ in perige	6 ♂ ☾ ♂ 19h. 9 ☾ in apoge 11 ♂ ☾ ♀ 10h. 14 ♂ ☾ ☾ oh. 15 ☉ eclipsed invis. 15 ♀ stationary 16 ♂ ☾ ♀ 13h. 18 ♂ ☾ ♀ 15h. 19 ♀ in ☾ 20 ☉ in ☾ 9h. 31m. 21 ☐ stationary 24 ♀ elong. max. 24 ☾ in perige 27 ♂ ☉ ♀ 2h. 29 ☾ eclips. invis. 30 ♀ in aphelion	3 ☐ ☉ ☐ 3h. 4 ♂ ☾ ♂ 10h. 6 ☾ in apoge 8 ♀ in aphelion 8 ♀ stationary 10 ♂ ☾ ♀ 2h. 10 ♂ ☾ ☾ 20h. 12 ♂ ☾ ♀ 6h. 15 ♂ ☾ ♀ 5h. 18 ☾ in perige 20 ☉ in ☾ 18h. 9m. 21 ♀ elong. max.

ad Annum 1798.

JULY

2	♂ ☾ ♂ 19h.
3	☾ in apoge
7	♂ ☉ ♀ 4h.
8	♂ ☾ ♀ 16h.
8	♂ in ☿
10	♂ ☾ ♀ oh.
12	♂ ☾ ♀ 11h.
12	♂ ☾ ♀ 20h.
13	♂ in perihelion
15	☾ in perige
20	♂ ☉ ♂ 1h.
22	☉ in ♉ 4h. 59m.
30	♂ ☾ ♂ 12h.
31	♂ stationary
31	☾ in apoge

AUGUST

5	♂ ☾ ♀ 8h.
9	♂ ☾ ♀ oh.
9	♂ ☾ ♀ 19h.
12	☾ in perige
13	♂ ☾ ♀ oh.
15	♂ in ☿
17	☉ ☾ ♀ 13h.
22	☉ in ♉ 11h. 24m.
22	♂ in perihelion
25	♀ in ☿
26	♂ ☾ ♂ 11h.
26	♂ in aphelion
27	☾ in apoge
31	♂ ☉ ♂ 12h.
31	♂ elong. max.

SEPTEMBER

1	♂ ☾ ♀ 20h.
6	♂ ☾ ♀ 3h.
7	♂ ☾ ♀ 20h.
10	♂ ☉ ♀ 6h.
10	☾ in perige
11	♂ ☾ ♀ 11h.
14	♂ stationary
15	♀ stationary
22	♂ ☾ ♂ 5h.
22	☉ in ♉ 7h. 57m.
24	☾ in apoge
26	♂ ☉ ♀ 21h.
28	♀ in perihelion
29	♂ ☾ ♀ 2h.
30	♂ stationary

OCTOBER

3	♂ ☾ ♀ 15h.
4	♂ in ☿
6	♂ stationary
7	♂ ☾ ♀ 17h.
7	♂ ☾ ♀ 23h.
8	☾ in perige
9	♂ in perihelion
12	♂ elong. max.
18	☉ ☾ ♀ 11h.
19	♂ ☾ ♂ 17h.
21	☾ in apoge
22	☉ in ♉ 15h. 58m.
26	♂ ☾ ♀ 3h.
31	♂ ☾ ♀ oh.

NOVEMBER

6	♂ ☾ ♀ 15h.
6	☾ in perige
7	☉ eclipsed invisib.
7	♀ stationary
7	♂ ☾ ♀ 7h.
11	♂ in ☿
13	♂ ☉ ♀ 4h.
14	♂ ☉ ♀ 1h.
16	♂ ☾ ♂ 20h.
17	☾ in apoge
21	☉ in ♉ 12h. 16m.
22	♂ ☾ ♀ 3h.
22	♂ in aphelion
23	☾ eclips. invisible
27	♂ ☾ ♀ 4h.

DECEMBER

1	♀ in ☿
3	☾ in perige
6	♂ ☾ ♀ 16h.
8	♂ ☾ ♀ 2h.
13	☉ ☾ ♀ 16h.
14	♀ in ☿
15	♂ ☾ ♂ 10h.
15	☾ in apoge
19	♂ ☾ ♀ 6h.
21	☉ in ♉ oh. 42m.
22	♂ in ☿
24	♂ ☾ ♀ 8h.
26	♂ elong. max.
27	♂ stationary
29	☾ in perige
31	♀ in ☿

A Table of the Sun's semi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 49		Lat. 50		Lat. 51		Lat. 52		Lat. 53		Lat. 54	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	6	8	6	8	6	8	6	9	6	9	6	9
2	6	12	6	13	6	13	6	14	6	14	6	15
3	6	17	6	18	6	18	6	19	6	19	6	20
4	6	22	6	22	6	22	6	24	6	25	6	25
5	6	26	6	27	6	27	6	29	6	30	6	31
6	6	31	6	32	6	33	6	34	6	36	6	37
7	6	36	6	37	6	38	6	40	6	41	6	43
8	6	41	6	42	6	43	6	45	6	47	6	48
9	6	45	6	47	6	48	6	50	6	52	6	54
10	6	50	6	52	6	54	6	56	6	58	7	0
11	6	55	6	57	6	59	7	1	7	3	7	6
12	7	0	7	2	7	4	7	7	7	9	7	12
13	7	5	7	7	7	10	7	12	7	15	7	18
14	7	10	7	13	7	15	7	18	7	21	7	24
15	7	15	7	18	7	21	7	24	7	27	7	31
16	7	21	7	24	7	27	7	30	7	33	7	37
17	7	26	7	29	7	33	7	36	7	40	7	44
18	7	31	7	35	7	38	7	42	7	46	7	51
19	7	37	7	41	7	45	7	49	7	53	7	58
20	7	43	7	47	7	51	7	55	8	0	8	5
21	7	49	7	53	7	57	8	2	8	7	8	12
22	7	55	7	59	8	4	8	9	8	14	8	20
23	8	1	8	6	8	11	8	16	8	22	8	28
24	8	7	8	12	8	18	8	24	8	30	8	36

By these Tables the Times of the Sun's Rising and Setting may be found, in any Part of the Kingdom of *Great-Britain* or *Ireland*, after the following Manner: Where the Latitude of the Place is known, take the Sun's Declination out of the Table, on the Noon of the Day you desire to know the Time of his Rising and Setting; and with it, according as it is either North or South, enter these Tables in the Left-

of his visible half Duration above the Horizon.

The Sun's Declination South.

Degr.	Lat. 49		Lat. 50		Lat. 51		Lat. 52		Lat. 53		Lat. 54	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	5	59	5	59	5	58	5	58	5	58	5	58
2	5	54	5	54	5	53	5	53	5	53	5	53
3	5	49	5	49	5	49	5	48	5	48	5	47
4	5	45	5	44	5	44	5	43	5	42	5	42
5	5	40	5	39	5	39	5	38	5	37	5	36
6	5	35	5	35	5	34	5	33	5	31	5	30
7	5	31	5	30	5	29	5	27	5	26	5	25
8	5	26	5	25	5	23	5	22	5	21	5	19
9	5	21	5	20	5	18	5	17	5	16	5	13
10	5	17	5	15	5	13	5	11	5	10	5	8
11	5	12	5	10	5	8	5	6	5	4	5	2
12	5	7	5	5	5	3	5	0	4	58	4	56
13	5	2	5	0	4	57	4	55	4	52	4	50
14	4	57	4	54	4	52	4	49	4	47	4	44
15	4	52	4	49	4	46	4	44	4	41	4	37
16	4	46	4	45	4	41	4	38	4	34	4	31
17	4	41	4	38	4	35	4	32	4	28	4	23
18	4	36	4	33	4	29	4	26	4	22	4	18
19	4	30	4	27	4	23	4	19	4	15	4	11
20	4	25	4	21	4	17	4	13	4	9	4	4
21	4	19	4	15	4	11	4	6	4	2	3	57
22	4	13	4	9	4	4	4	0	3	55	3	50
23	4	7	4	3	3	58	3	53	3	47	3	42
24	4	1	3	56	3	51	3	46	3	40	3	34

Left-hand Column, under the Word Degrees; then look for the Latitude of the Place in the Top of the Table; and in that Column, against the Sun's Declination, will be found the Time of his visible half Duration above the Horizon, or Time of his Setting, correct by Refraction; then subtract the Time of his Setting from 12 Hours, the Remainder will be the Time of his Rising; double the Time of his Setting, the

A Table of the Sun's semi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 60	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	6	9	6	10	6	10	6	10	6	11	6	11
2	6	15	6	16	6	16	6	17	6	17	6	18
3	6	21	6	22	6	22	6	23	6	24	6	25
4	6	27	6	28	6	29	6	30	6	31	6	32
5	6	32	6	34	6	35	6	36	6	38	6	39
6	6	38	6	40	6	41	6	43	6	44	6	46
7	6	44	6	46	6	48	6	49	6	51	6	53
8	6	50	6	52	6	54	6	56	6	58	7	1
9	6	56	6	58	7	1	7	3	7	5	7	8
10	7	2	7	5	7	7	7	10	7	13	7	16
11	7	8	7	10	7	14	7	17	7	20	7	23
12	7	15	7	18	7	21	7	34	7	27	7	31
13	7	21	7	24	7	28	7	31	7	35	7	39
14	7	28	7	31	7	35	7	39	7	43	7	47
15	7	34	7	39	7	42	7	46	7	51	7	56
16	7	41	7	45	7	49	7	54	7	59	8	4
17	7	48	7	52	7	57	8	1	8	7	8	13
18	7	55	8	0	8	5	8	10	8	16	8	22
19	8	2	8	7	8	13	8	19	8	25	8	32
20	8	10	8	15	8	21	8	28	8	35	8	42
21	8	18	8	24	8	30	8	37	8	45	8	53
22	8	26	8	32	8	39	8	47	8	55	9	4
23	8	34	8	41	8	49	8	57	9	6	9	16
24	8	43	8	51	8	59	9	8	9	18	9	29

the Sum will be the Length of the Day ; and double the Time of his Rising, the Sum will be the Length of the Night. But if the Latitude of the Place, and Declination of the Sun, consist of Degrees and Minutes, then a small Allowance must be made for the Minutes in both Cases, which may be done by a Person of an ordinary Capacity by a mental Proportion only. Thus, to find the Time of the Sun's Rising and Setting

at

of his visible half Duration above the Horizon.

The Sun's Declination South.

Degr.	Lat. 55	Lat. 56	Lat. 57	Lat. 58	Lat. 59	Lat. 60
	h m	h m	h m	h m	h m	h m
0	6 4	6 4	6 4	6 4	6 4	6 4
1	5 58	5 58	5 58	5 58	5 57	5 57
2	5 52	5 52	5 52	5 51	5 51	5 50
3	5 47	5 46	5 45	5 45	5 44	5 43
4	5 41	5 40	5 39	5 38	5 37	5 36
5	5 35	5 34	5 33	5 32	5 31	5 29
6	5 29	5 28	5 27	5 25	5 24	5 22
7	5 23	5 22	5 20	5 19	5 17	5 15
8	5 17	5 16	5 14	5 12	5 10	5 8
9	5 12	5 10	5 8	5 5	5 3	5 2
10	5 5	5 3	5 1	4 59	4 56	4 53
11	4 59	4 57	4 54	4 52	4 49	4 46
12	4 53	4 51	4 48	4 45	4 42	4 38
13	4 47	4 44	4 41	4 38	4 34	4 30
14	4 41	4 37	4 34	4 30	4 27	4 23
15	4 34	4 31	4 27	4 23	4 19	4 14
16	4 27	4 24	4 20	4 15	4 11	4 6
17	4 21	4 17	4 12	4 8	4 3	3 57
18	4 14	4 9	4 5	4 0	3 54	3 48
19	4 7	4 2	3 56	3 51	3 45	3 39
20	3 59	3 54	3 49	3 43	3 36	3 29
21	3 52	3 46	3 40	3 34	3 27	3 19
22	3 44	3 38	3 31	3 24	3 17	3 9
23	3 36	3 29	3 23	3 15	3 6	2 57
24	3 27	3 20	3 13	3 5	2 55	2 45

at Aberdeen in Scotland, on the Longest Day; the Latitude of that Place is accounted 57 Degr. 7 Min. North, and the Sun's Declination 23 Deg. 28 Min. likewise North. By these you will find by the Table, that 5 Min. for the Sun's Declination, and 1 Min. for the Latitude of the Place, are both, to be added to 8 Hours 49 Min. the Time belonging to 57 Degr. of Latitude and 23 Degr. of North Declination, and the Sum will be 8 Hours 55 Min. the Time of his apparent Setting at Aberdeen, on the longest Day, whose Complement to 12 Hours, viz. 3 Hours 5 Min. will be the Time of his Rising, &c.

A Table of the Sun's Right-Ascension in Time, the greatest

Degt.	♈			♉			♊			♋			♌			♍		
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
0	0	0	0	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23
1	0	3	40	1	55	27	3	55	25	6	4	22	8	12	54	10	12	12
2	0	7	20	1	59	17	3	59	36	6	8	43	8	17	3	10	16	0
3	0	11	0	2	3	8	4	3	48	6	13	5	8	21	11	10	19	48
4	0	14	41	2	6	59	4	8	0	6	17	26	8	25	19	10	23	35
5	0	18	21	2	10	51	4	12	13	6	21	48	8	29	26	10	27	22
6	0	22	2	2	14	44	4	16	26	6	26	9	8	33	31	10	31	8
7	0	25	42	2	18	37	4	20	40	6	30	30	8	37	37	10	34	54
8	0	29	23	2	22	3	4	24	55	6	34	51	8	41	41	10	38	40
9	0	33	4	2	26	25	4	29	10	6	39	11	8	45	45	10	42	25
10	0	36	45	2	30	20	4	33	26	6	43	31	8	49	48	10	46	9
11	0	40	26	2	34	16	4	37	42	6	47	51	8	53	51	10	49	53
12	0	44	8	2	38	13	4	41	59	6	52	11	8	57	52	10	53	37
13	0	47	50	2	42	10	4	46	16	6	56	31	9	1	53	10	57	20
14	0	51	32	2	46	8	4	50	34	7	0	50	9	5	53	11	1	3
15	0	55	14	2	50	7	4	54	52	7	5	8	9	9	53	11	4	46
16	0	58	5	2	54	7	4	59	10	7	9	26	9	13	52	11	8	28
17	1	2	40	2	58	7	5	3	29	7	13	44	9	17	50	11	12	10
18	1	6	23	3	2	8	5	7	49	7	18	1	9	21	47	11	15	52
19	1	10	7	3	6	9	5	12	9	7	22	18	9	25	44	11	19	34
20	1	13	51	3	10	12	5	16	29	7	26	34	9	29	40	11	23	15
21	1	17	35	3	14	15	5	20	49	7	30	50	9	33	35	11	26	56
22	1	21	20	3	18	19	5	25	9	7	35	5	9	37	29	11	30	37
23	1	25	6	3	22	23	5	29	30	7	39	20	9	41	23	11	34	18
24	1	28	52	3	26	29	5	33	51	7	43	34	9	45	16	11	37	58
25	1	32	38	3	30	35	5	38	12	7	47	47	9	49	9	11	41	39
26	1	36	25	3	34	41	5	42	34	7	52	0	9	53	1	11	45	19
27	1	40	12	3	38	49	5	46	55	7	56	12	9	56	52	11	49	0
28	1	44	0	3	42	57	5	51	17	8	0	24	10	0	43	11	52	40
29	1	47	48	3	47	6	5	55	38	8	4	35	10	4	33	11	56	20
30	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23	12	0	0

The time of the southing or meridian transits of the fixed stars in pa. 46, may be found thus. On the noon of the day, preceding the night in which you want to know the time of the southing of any of those stars, find the Sun's place in the Ephemeris, and with it take out of the above table his right ascension in time; this you may do by inspection to a minute, which will be sufficient for your present purpose: Then from the right-ascension of the star in pa. 46, subtract the right-ascension of the Sun, the remainder will be the estimate time of the star's southing, and will not differ from the true time above 2 or 3 minutes at most, which may be near enough for ordinary uses. But when great exactness is required, reduce the Sun's place to this estimate time, and with it find in the above table his right ascension to seconds, which being subtracted from that of the star, the remainder will be the

Obliquity of the Ecliptic being $23^{\circ} 28'$.

Deg.	α			η			$\uparrow$			$\wp$			$\equiv$			$\times$		
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
0	12	0	0	13	51	37	15	51	15	18	0	0	20	8	45	22	8	23
1	12	3	40	13	55	27	15	55	25	18	4	22	20	12	54	22	12	12
2	12	7	20	13	59	17	15	59	36	18	8	43	20	17	3	22	16	0
3	12	11	0	14	3	8	16	3	48	18	13	5	20	21	11	22	19	48
4	12	14	41	14	6	59	16	7	0	18	17	26	20	25	19	22	23	35
5	12	18	21	14	10	51	16	12	13	18	21	48	20	29	26	22	27	22
6	12	22	2	14	14	44	16	16	26	18	26	9	20	33	31	22	31	8
7	12	25	42	14	18	37	16	20	40	18	30	30	20	37	37	22	34	54
8	12	29	23	14	22	31	16	24	55	18	34	51	20	41	41	22	38	40
9	12	33	4	14	26	25	16	29	10	18	39	11	20	45	45	22	42	25
10	12	36	45	14	30	20	16	33	26	18	43	31	20	49	48	22	46	9
11	12	40	26	14	34	16	16	37	42	18	47	51	20	53	51	22	49	53
12	12	44	8	14	38	13	16	41	59	18	52	11	20	57	52	22	53	37
13	12	47	50	14	42	10	16	46	16	18	56	31	21	1	53	22	57	20
14	12	51	32	14	46	8	16	50	34	19	0	50	21	5	53	23	1	3
15	12	55	14	14	50	7	16	54	52	19	5	8	21	9	53	23	4	46
16	12	58	57	14	54	7	16	59	10	19	9	26	21	13	52	23	8	28
17	13	2	40	14	58	7	17	3	29	19	13	44	21	17	50	23	12	10
18	13	6	23	15	2	8	17	7	49	19	18	1	21	21	47	23	15	52
19	13	10	7	15	6	9	17	12	9	19	22	18	21	25	44	23	19	34
20	13	13	51	15	10	12	17	16	29	19	26	34	21	29	40	23	23	15
21	13	17	35	15	14	15	17	20	49	19	30	50	21	33	35	23	26	56
22	13	21	20	15	18	19	17	25	9	19	35	5	21	37	29	23	30	37
23	13	25	6	15	22	23	17	29	30	19	39	20	21	41	23	23	34	18
24	13	28	52	15	26	29	17	33	51	19	43	34	21	45	16	23	37	58
25	13	32	38	15	30	35	17	38	12	19	47	47	21	49	9	23	41	39
26	13	36	25	15	34	41	17	42	34	19	52	0	21	53	1	23	45	19
27	13	40	12	15	38	49	17	46	55	19	56	12	21	56	52	23	49	0
28	13	44	0	15	42	57	17	51	17	20	0	24	22	0	43	23	52	40
29	13	47	48	15	47	6	17	55	38	20	4	35	22	4	33	23	56	20
30	13	51	37	15	51	15	18	0	0	20	8	45	22	8	23	24	0	0

the true time of the star's culminating or southing. And if from the time of the star's southing you subtract the semidiurnal arc belonging to it, the remainder will be the time of the star's rising; and being added to it, the sum will be the time of its setting.

Annexed is an Ex. of SIRIUS for Jan. 31, 1798.

$\odot$'s place at noon $\equiv 11^{\circ} 58'$	h	m	s
Rt. Asc. of Sirius - -	6	35	58
$\odot$'s rt. asc. subtract -	20	57	43
*'s estimate southing -	9	38	15
$\odot$'s rt. asc. at that time sub.	20	59	19
*'s true southing - -	9	36	39
Semid. arc sub. & add -	4	36	55
*'s rising aftern. - -	4	59	44
*'s setting - -	14	13	34

A Table of the mean Right-Ascensions in time, Semidurnal-Arcs, Declinations, and Magnitudes of 40 remarkable fixed Stars, with their Names, and Bayer's Literal Characters, for January 1, 1790.

Names of the Stars	Ch.	Rt. Asc.			Declination			Semid.Ar.			Ma
		h	m	s	°	'	"	h	m	s	
Pole star, Alruccabah -	α	0	48	57	88	11	34	n	fets	not	2
Andromeda's girdle, Mirach -	β	0	57	48	34	29	47	n	10	7	32
Andromeda's left foot, Almach	γ	1	51	10	41	18	41	n	fets	not	2
Ram's following horn -	α	1	55	18	22	27	43	n	8	9	35
Whale's jaw, Menkar -	α	2	51	19	3	15	11	n	6	19	48
Medusa's head, Algol - -	β	2	54	32	40	7	41	n	fets	not	2
Perseus's right side, Algenib	α	3	9	26	49	7	6	n	fets	not	2
Brightest of the 7 stars -	η	3	35	2	23	26	22	n	8	16	40
Bull's south eye, Aldebaran	α	4	23	51	16	4	19	n	7	28	51
Auriga's left shoulder, Capella	α	5	1	11	45	46	57	n	fets	not	1
Orion's left foot, Rigel -	β	5	4	27	8	27	38	s	5	20	28
Bull's north horn - -	β	5	12	57	28	25	12	n	8	57	1
Orion's left shoulder, Bellatrix	γ	5	13	54	6	8	50	n	6	34	41
Orion's girdle - -	ϵ	5	25	32	1	21	22	s	5	56	42
Orion's right shoulder, Betelgeuse	α	5	43	46	7	21	2	n	6	40	58
In the great Dog's mouth, Sirius	α	6	35	58	16	25	8	s	4	36	55
Head of the 1st Twin, Castor	α	7	21	11	32	19	57	n	9	38	21
In the less Dog's thigh, Procyon	α	7	28	21	5	46	33	n	6	32	50
Head of the 2d Twin, Pollux	β	7	32	30	28	31	19	n	8	58	13
Hydra's heart, Alphard -	α	9	17	15	7	45	30	s	5	24	20
Lyon's heart, Regulus -	α	9	57	11	12	58	43	n	7	11	28
Great Bear, Lower Pointer	β	10	49	4	57	30	19	n	fets	not	2
Great Bear, Upper Pointer -	α	10	50	39	62	53	25	n	fets	not	2
Lion's tail, Deneb - -	β	11	38	24	15	44	22	n	7	27	18
Great Bear, 1st in the tail, Aliath	ϵ	12	45	5	57	7	0	n	fets	not	2
Virgius's spike - -	α	13	14	10	10	3	38	s	5	12	20
Dragon's tail - -	α	13	58	42	65	20	53	n	fets	not	2
Bootes, Arcturus - -	α	14	6	11	20	20	20	n	7	55	26
Libra, Southern Scale - -	α	14	39	22	15	9	30	s	4	44	23
Libra, Northern Scale - -	β	15	5	47	8	36	4	s	5	19	57
Bright star in the North Crown	α	15	25	49	27	25	35	n	8	48	36
Scorpion's heart, Antares	α	16	16	35	25	56	54	s	3	34	6
Hercules's head, Ras. Algethi	α	17	5	7	14	38	4	n	7	20	41
Head of Serpentarius - -	α	17	25	8	12	43	20	n	7	9	50
Dragon's head, Rastaben -	γ	17	51	51	51	31	28	n	fets	not	2
Bright star in the Harp, Lyra	α	18	29	45	38	35	39	n	fets	not	1
Bright star in the Eagle, Atair	α	19	40	25	8	18	55	n	6	45	57
Mouth of south Fish, Fomalhaut	α	22	45	53	30	43	12	s	2	52	6
Pegasus's wing, Markab -	α	22	54	15	14	4	11	n	7	17	10
Andromeda's head - -	α	23	57	29	27	55	38	n	8	52	19

A Table of the Longitudes, Latitudes, and Magnitudes of the most remarkable fixed Stars that the Moon can Eclipse, or make a near Appulse unto; exactly rectified to the beginning of the year 1790.

Con.	Cha.	Long.	Lat.	Mag.	Con.	Cha.	Long.	Lat.	Mag.
		° ' "	° ' "				° ' "	° ' "	
X	♈	♈ 11 13 11	♈ 2 9 44 n	4	♈	♈ 12 9 29	♈ 0 21 48 n	2	
		14 36 25	1 5 37 n	4		18 4 37	1 49 14 s	3	
	♈	16 56 25	0 13 11 s	4		22 12 9	4 24 41 n	3	
	♈	♈ 17 54 44	1 48 7 n	4		24 26 33	4 2 52 n	4	
	♈	27 3 44	4 1 36 n	3		24 49 47	0 1 1 n	4	
	♈	♈ 2 52 0	5 45 30 s	3		26 56 12	3 29 24 n	4	
	♈	5 31 37	2 35 37 s	3		27 32 46	0 6 53 n	4	
	♈	6 51 20	5 29 2 s	1		29 38 28	1 57 17 s	3	
	♈	19 38 37	5 21 59 n	2		♈ 0 0 35	5 26 15 s	3	
	♈	21 51 15	2 13 29 s	3		♈ 0 15 33	1 2 18 n	2	
	♈	♈ 0 30 37	0 55 4 s	4		1 42 50	1 39 52 n	4	
	♈	2 22 2	0 50 34 s	3		4 52 13	4 0 23 s	4	
	♈	5 10 20	6 46 12 s	2		6 49 58	4 32 17 s	1	
	♈	7 0 30	2 2 28 n	3		8 31 42	6 5 21 s	4	
	♈	15 35 29	0 12 19 s	3		28 20 3	6 56 48 s	3	
	♈	20 19 34	6 40 4 n	1		♈ 0 16 58	2 22 24 n	4	
	♈	♈ 4 36 51	3 10 22 n	4		3 23 31	2 5 31 s	4	
	♈	5 47 9	0 4 13 n	4		7 14 48	3 55 22 s	3	
	♈	18 43 23	3 1 57 s	4		9 27 17	3 24 55 s	3	
	♈	21 19 38	3 46 1 s	4		11 54 32	5 2 33 s	3	
	♈	24 58 23	4 51 9 n	4		12 3 36	0 53 36 n	3	
	♈	26 54 49	0 27 27 n	1		13 19 21	1 28 7 n	4	
	♈	♈ 3 27 25	0 8 29 n	4		♈ 1 6 55	4 36 46 n	3	
	♈	18 34 47	0 31 21 s	4		17 16 0	4 57 31 s	4	
	♈	22 6 32	3 2 51 s	4		18 50 53	2 32 6 s	4	
	♈	24 10 47	0 41 36 n	3		20 36 5	2 33 40 s	3	
	♈	♈ 0 26 10	5 4 42 n	3		25 47 17	2 3 47 s	4	
	♈	1 54 16	1 22 24 n	3		♈ 0 19 42	2 43 22 n	4	
	♈	7 14 41	2 48 57 n	3		8 38 41	0 22 57 s	4	
	♈	20 54 50	2 2 11 s	1		14 12 30	1 2 8 s	4	

This table shewing the mean longitudes of 60 stars to the beginning of the year 1790, their mean longitudes for any other time may be found if $50\frac{1}{3}$ seconds be added for each succeeding, and subtracted for each preceding year, and proportionably for a part of a year. Thus, to find the longitude of the first star ♈♈, or ♈♈ piscium, for Feb. 15, 1792, or 2 years and one eighth after the tabular time; here $2\frac{1}{8}$ times $50\frac{1}{3}$ sec. make $1' 47''$, which being added to the tabular longitude, gives ♈ 11 14' 58" for the longitude required at the given time.—The latitudes vary not.

The Latitudes and Longitudes of Ninety Places.

	Lat. ° /	Long. ° /		Lat. ° /	Long. ° /
Alexandria, Egypt	31 11 n	30 17 e	Isfahan	32 25 n	52 55 e
Amsterdam, Hol.	52 23 n	4 52 e	Land's end	50 6 n	5 50 w
Archangel, Ruf.	64 34 n	38 30 e	Leghorn	43 33 n	10 25 e
Athens	37 40 n	23 52 e	Leostoff	52 38 n	1 54 e
Babelmandel	12 50 n	43 50 e	Leverpool	53 22 n	3 10 w
Batavia	6 12 s	106 45 e	Lima	12 1 s	76 50 w
Bengal	22 0 n	92 45 e	Lisbon	38 42 n	9 4 w
Berlin	52 33 n	13 26 e	Lizard	49 57 n	5 21 w
Bombay Isle	19 42 n	73 3 e	London	51 31 n	0 0
Boston, Amer.	42 25 n	70 37 w	Madras	13 8 n	80 7 e
Breslau	51 3 n	17 13 e	Madrid	40 25 n	3 45 w
Brest	48 23 n	4 30 w	Manilla	14 30 n	120 25 e
Bristol	51 28 n	2 30 w	Marseilles	43 18 n	5 21 e
Buenos Ayres	34 25 s	58 0 w	Mexico	19 54 n	100 5 w
Cadiz	36 31 n	6 7 w	Mississipi, mouth	29 0 n	89 17 w
Calais	50 58 n	1 51 e	Moscow	55 25 n	37 51 e
Cairo, Egypt	30 2 n	31 26 e	Naples	40 51 n	14 19 e
Cambridge	52 13 n	0 4 e	Newcastle	55 0 n	1 18 w
Canaria Islands	28 1 n	15 0 w	Oporto	40 53 n	8 35 w
Canton	23 8 n	113 2 e	Orkney I. northend	59 24 n	3 23 w
Cape of Goodhope	34 29 s	18 23 e	Oxford	51 45 n	1 16 w
Cape Horn	55 59 s	67 26 w	Paris	48 50 n	2 25 e
Carthegena	10 27 n	75 26 w	Pekin	39 55 n	116 22 e
Charles Town Am.	33 22 n	79 50 w	Peterburg	59 56 n	30 19 e
Constantinople	41 0 n	28 53 e	Philadelphia	39 57 n	75 18 w
Copenhagen	55 41 n	12 50 e	Plymouth	50 24 n	4 15 w
Corinth	37 30 n	23 0 e	Port Mahon	39 51 n	3 53 e
Corke	51 54 n	8 30 w	Port Royal, Jam.	17 40 n	76 37 w
Dantzic	54 22 n	18 36 e	Portsmouth	50 48 n	1 1 w
Dover	51 7 n	1 19 e	Prague	50 5 n	14 15 e
Dublin	53 20 n	6 55 w	Quebec	46 55 n	71 12 w
Edinburgh	55 58 n	3 1 w	Rome	41 54 n	12 32 e
Ferro, Isle	27 48 n	18 6 w	Scilly Isles	50 0 n	6 45 w
Finisterre, Cape	42 57 n	9 36 w	Smyrna	38 28 n	27 25 e
Genoa	44 25 n	8 41 e	Stockholm	59 22 n	18 12 e
Gibraltar	36 5 n	4 46 w	Syracuse	37 4 n	15 20 e
Glasgow	55 52 n	4 5 w	Tangier	35 55 n	5 45 w
Goa	15 31 n	73 50 e	Teneriff	28 16 n	16 32 w
Göttingen	51 32 n	9 58 e	Tunis	36 47 n	10 16 e
Greenwich	51 29 n	0 5 e	Turin	45 5 n	7 45 e
Hacuit's Head.	79 55 n	12 0 e	Venice	45 27 n	12 24 e
Halifax, America	44 46 n	63 20 w	Verd, Cape	14 47 n	17 28 w
Havanna	23 12 n	81 11 w	Vienna	48 11 n	16 28 e
Helena, I. St.	15 55 s	5 49 w	Upsal	59 52 n	17 43 e
Jerusalem	31 50 n	35 25 e	Uraniberg	55 54 n	12 52 e